

EPA
COPY

LABORATORY ANALYSIS
SOUTHERN CALIFORNIA
CHEMICAL COMPANY
GROUND WATER MONITORING WELLS
DOHS LAB TEMPLE STREET

FORM LAB 803 (REV. 10-79)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received <u>3-11-85</u>	Lab No. <u>5710</u>
Name and Address of Owner or Source <u>Southern Calif. Chemical Co.</u>		Collected By <u>AAK</u>	Serial Number <u>R</u>
Sampling Point <u>Well #1</u>		County <u>Los Angeles</u>	Date and Time Collected <u>3/11/85, 11:30 AM</u>
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) <u>groundwater</u>			
Sample Size	Collection Period (Date and Time)	<u>5.36</u> <u>11.97</u> + <u>2.60</u> pCi/L <u>Al</u> <u>Alpha</u> <u>11.97</u> + <u>5.24</u> pCi/L <u>Al</u> <u>Gross Beta</u> <u>Radium</u> <u>Send result to</u> <u>Harris Tann</u> <u>Southern Calif. Lab.</u>	
Air: Finish	Finish		
Start	Start		
Net			
Composite Sample:	Finish		
	Start		

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section SAMPLE FOR CHEMICAL ANALYSIS		Date Received <u>3-11-85</u>	Lab. No. <u>14457</u>
Purveyor and Address (include city and county) <u>Southern Calif. Chem. Co.</u> <u>Santa Fe Springs</u>		System Number <u>000000</u>	Serial Number <u>21102</u>
Sampling Point <u>Well #1</u>		Collected by <u>AAK</u>	Date and Hour Collected <u>3/11/85, 11:35 AM</u>
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other <u>groundwater</u>	Send Report To <input type="checkbox"/> WSS Dist. # <input type="checkbox"/> DOT Dist. # <input checked="" type="checkbox"/> RWQCB # <u>4</u>	<input type="checkbox"/> County HD <input type="checkbox"/> National Park Serv. <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <u> </u> <input type="checkbox"/> Mg <u> </u> <input type="checkbox"/> Fe Total <u> </u> <input type="checkbox"/> Mn <u> </u> <input type="checkbox"/> Na <u> </u> <input type="checkbox"/> K <u> </u> <input type="checkbox"/> pH <u> </u> <input type="checkbox"/> Total Dissolved Solids <u> </u>		<input type="checkbox"/> Hargness <u> </u> <input type="checkbox"/> HCO ₃ <u> </u> <input type="checkbox"/> CO ₃ <u> </u> <input type="checkbox"/> OH <u> </u> <input type="checkbox"/> Total Alk. <u> </u> <input type="checkbox"/> Cl <u> </u> <input type="checkbox"/> SO ₄ <u> </u> <input type="checkbox"/> F <u> </u> <input type="checkbox"/> NO ₃ <u> </u>	<input checked="" type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al <u> </u> <input type="checkbox"/> Ag <u> </u> <input type="checkbox"/> As <u> </u> <input type="checkbox"/> B <u> </u> <input type="checkbox"/> Cd <u> </u> <input type="checkbox"/> Cr <u> </u> <input type="checkbox"/> Cu <u> </u> <input type="checkbox"/> Hg <u> </u> <input type="checkbox"/> Pb <u> </u> <input type="checkbox"/> Ni <u> </u> <input type="checkbox"/> Se <u> </u> <input type="checkbox"/> Zn <u> </u>	<input checked="" type="checkbox"/> Other analyses desired (specify) <u>Pesticides</u> <u>none detected</u>
<input type="checkbox"/> Turb. TU <u> </u> <input type="checkbox"/> Spec. Cond. <u> </u>	<input type="checkbox"/> NH ₃ -N <u> </u> <input type="checkbox"/> ORN <u> </u>	<input type="checkbox"/> BOD <u> </u> <input type="checkbox"/> Grease <u> </u>	<input type="checkbox"/> Susp. Solids <u> </u> <input type="checkbox"/> Set Solids <u> </u>	Date Reported <u>3-11-85</u> Analyst <u> </u>

Form LAB 800 (2-80)

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Calif. Chem. Co. Santa Fe Springs

Sampling Point

Well # 1

Date Received

3-11-85

Lab. No.

14453

System Number

000000

Serial Number

C 21153

Collected by

AAK/FH

Date and Hour Collected

3/11/85, 11am

Type of Sample

☐ Raw Surface Water
☐ Drinking Water
☐ Raw
☐ Treated

☐ Waste water:
☐ Raw ☐ Chlorinated
☐ Trade Waste
☒ Other *Groundwater*

Send Report To

☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWQCB # *4* ☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS		TRACE ELEMENTS		Other analyses desired (specify):	
(mg/l as Ca CO ₃)					
<input type="checkbox"/> Ca	<input type="checkbox"/> Hardness	<input type="checkbox"/> Al	<p><i>V.O.A.</i> <i>methylene chloride = 34 ug/l</i> <i>trichloroethylene = 16 ug/l</i> <i>perchloroethylene = < 0.5 ug/l</i></p>		
<input type="checkbox"/> Mg	<input type="checkbox"/> HCO ₃	<input type="checkbox"/> Ag			
<input type="checkbox"/> Fe Total	<input type="checkbox"/> CO ₃	<input type="checkbox"/> As			
<input type="checkbox"/> Mn	<input type="checkbox"/> OH	<input type="checkbox"/> B			
<input type="checkbox"/> Na	<input type="checkbox"/> Total Alk.	<input type="checkbox"/> Cd			
<input type="checkbox"/> K	<input type="checkbox"/> Cl	<input type="checkbox"/> Cr			
<input type="checkbox"/> pH	<input type="checkbox"/> SO ₄	<input type="checkbox"/> Cu			
<input type="checkbox"/> Total Dissolved Solids	<input type="checkbox"/> F	<input type="checkbox"/> Hg			
	<input type="checkbox"/> NO ₃	<input type="checkbox"/> Pb			
		<input type="checkbox"/> Ni			
		<input type="checkbox"/> Se			
		<input type="checkbox"/> Zn			
		<input type="checkbox"/>			
<input type="checkbox"/> Turb. TU	<input type="checkbox"/> NH ₃ -N	<input type="checkbox"/> BOD	<input type="checkbox"/> Susp. Solids	<input type="checkbox"/> PO ₄	
<input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> ORG-N	<input type="checkbox"/> Grease	<input type="checkbox"/> Set Solids ml/1/hour	<input type="checkbox"/> MBAS	

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

Purveyor and Address

Southern Calif. Chem. Co. SFS

DATE

3/11/85

TIME

3:15

LAB NO.

10082

COUNTY

Los Angeles

DATE AND HOUR COLLECTED

3/11/85, 11:15

SAMPLING POINT

Well # 1

SYSTEM NUMBER

000000

COLLECTED BY

AAK

BOTTLE CAP NUMBER

AM

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER
☒ OTHER (SPECIFY) *groundwater*

SEND REPORT TO:

☐ SEB DIST ☐ COUNTY HD
☒ RWQCB # *4* ☐ OTHER
☐ NAT'L PARK
PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☐ FECAL COLIFORM
☐ SPC ☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	RESULTS	
PORTIONS IN ML. (LOGS)	1	1	1	1	1																	COLIFORM/100ml
PRESUMPTIVE TEST	24																					<input checked="" type="checkbox"/> MPN <i>< 20</i>
CONFIRMED TEST	24																					<input type="checkbox"/> MF
E.C.	24																					FECAL COLIFORM/100ml
																					<input type="checkbox"/> MPN	
																					<input type="checkbox"/> MF	
																					SPC/ml at 35C	C12 RES. mg/liter
																					ANALYST <i>PS</i>	<i>3/11/85</i>

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-11-85	Lab. No. 14449
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern California Edison Co. SFS		System Number 000000	Serial Number C 21154
Sampling Point Well #1		Collected by AAK/FAF	Date and Hour Collected 3/11/85, 11:10 AM
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Drinking Water <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other Ground water		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃)		TRACE ELEMENTS <input checked="" type="checkbox"/> Other analyses desired (specify): Cr+6 = none detected ESTHETICS PHENOLS = 4.001 mg/ml	
<input type="checkbox"/> Ca 180. <input type="checkbox"/> Mg 54. <input type="checkbox"/> Fe Total 40.95 <input type="checkbox"/> Mn 0.75 <input type="checkbox"/> Na 104. <input type="checkbox"/> K 7. <input type="checkbox"/> pH 7.4 <input checked="" type="checkbox"/> Total Hardness 131.3 <input type="checkbox"/> Dis-solved Solids	<input type="checkbox"/> Hardness 670. <input type="checkbox"/> HCO ₃ 300. <input type="checkbox"/> CO ₃ 0. <input type="checkbox"/> OH 0. <input type="checkbox"/> Total Alk. 300. <input type="checkbox"/> Cl 306. <input type="checkbox"/> SO ₄ 240. <input type="checkbox"/> F 0.35 <input type="checkbox"/> NO ₃ 21.	<input type="checkbox"/> Al <input checked="" type="checkbox"/> Ag 10.001 <input checked="" type="checkbox"/> As 0.01 <input type="checkbox"/> B <input checked="" type="checkbox"/> Cd <0.001 <input checked="" type="checkbox"/> Cr 0.014 <input checked="" type="checkbox"/> Cu 0.008 <input checked="" type="checkbox"/> Hg <0.001 <input checked="" type="checkbox"/> Pb 0.01 <input checked="" type="checkbox"/> Ni 0.10 <input checked="" type="checkbox"/> Se 0.01 <input checked="" type="checkbox"/> Zn 0.03 <input checked="" type="checkbox"/> B 0.101 ESTHETICS	Date Reported 3-8-85 Analyst HL MP ST MD
<input type="checkbox"/> Turb. TU <input checked="" type="checkbox"/> Spec. Cond. 2018	<input checked="" type="checkbox"/> NH ₃ -N 0.24 <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)
*Southern Calif. Chem. Co
SFS*

Date Received *3-21-85* (Leave Blank)

Lab. No. *10081*

System Number *00X000*

Serial Number *C 21158*

Sampling Point *Well # 2*

Collected by *AAK/FM*

Date and Hour Collected *2/2 + 3/6, 11 AM*

Type of Sample
☐ Raw Surface Water
☐ Drinking Water
☐ Raw
☐ Treated
☐ Waste water:
☐ Raw
☐ Chlorinated
☐ Trade Waste
☒ Other *g/water*

Send Report To
☐ WSS Dist. #
☐ DOT Dist. #
☒ RWQCB # *4*
☐ County HD
☐ National Park Serv.
☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS (mg/l as Ca CO₃)

☐ Ca *228*
☐ Mg *12*
☐ Fe Total *3.1*
☐ Mn *7.0*
☐ Na *97*
☐ K *6*
☐ pH *7.5*
☐ Total Dissolved Solids *1505*

☐ Hardness *620*
☐ HCO₃ *282*
☐ CO₃ *0*
☐ OH *0*
☐ Total Alk. *382*
☐ Cl *238*
☐ SO₄ *295*
☐ F *0.45*
☐ NO₃ *14*

TRACE ELEMENTS

☐ Al
☒ Ag *<0.001*
☒ As *0.014*
☐ B
☒ Cd *<0.001*
☒ Cr *<0.01*
☒ Cu *<0.02*
☒ Hg *<0.001*
☒ Pb *<0.01*
☒ Ni *<0.05*
☒ Se *<0.005*
☒ Zn *<0.01*
☒ Ba *157*

☒ Other analyses desired (specify):
~~Pesticides and~~
 Phenols = *1.009 mg/ml*
Cr⁶⁺ = not detected
(< 0.001 mg/ml)

Date Reported *3-21-85*

Analyst *NP RCLST
ML MD*

☐ Turb. TU
☒ Spec. Cond. *2010* μ mhos/cm
☒ NH₃-N *0.48*
☐ BOD
☐ Grease
☐ Susp. Solids
☐ Set Solids ml/1/hour
☐ PO₄
☐ MBAS
☐ ORG-N

Form LAB-800 (2-80)

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

Purveyor and Address
Southern Calif. Chemical Co

DATE *3/6/85* TIME *3:15* LAB NO. *10081*

COUNTY *Los Angeles* DATE AND HOUR COLLECTED *3/6/85, 11:30*

SAMPLING POINT *Well # 2* SYSTEM NUMBER *00X000*

COLLECTED BY *FM/AAK* BOTTLE CAP NUMBER *05244*

TYPE OF SAMPLE
☐ DRINKING WATER (ANY SOURCE)
☐ SEWAGE
☐ RAW SURFACE WATER
☒ OTHER (SPECIFY) *g...*

SEND REPORT TO:
☐ SEB DIST
☒ RWQCB # *4*
☐ NAT'L PARK
☐ COUNTY HD
☐ OTHER
 PHONE NO. ()

ANALYSES DESIRED AND REMARKS:
☒ COLIFORM
☐ FECAL COLIFORM
☐ SPC
☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PORTIONS IN ML (LOGS)	1	1	1	1	1															
PRESUMPTIVE TEST	24	+	+	+	+	+														
CONFIRMED TEST	24	+	+	+	+	+														
E. C.	24																			

RESULTS

☒ COLIFORM/100ml
☒ MPN *>16*
☐ MF

FECAL COLIFORM/100ml
☐ MPN
☐ MF

SPC/ml at 35C
 C12 RES. mg/liter

ANALYST *NP*

LABORATORY REMARKS
☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

(REV. 9/81) FORM LAB 801
04717-449-12-B1-SMA THE CALIF. ONSP

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received <u>3-6-85</u> (Leave Blank)	Lab. No. <u>14383</u>
SAMPLE FOR CHEMICAL ANALYSIS		System Number <u>0000</u>	Serial Number <u>C 21157</u>
Purveyor and Address (include city and county) <u>Southern Calif. Chem. Co SFS</u>		Collected by <u>AAK/FM</u>	Date and Hour Collected <u>2/23/85, 11 AM</u>
Sampling Point <u>Well # 2</u>			
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other <u>g/water</u>		
		Send Report To	<input type="checkbox"/> WSS Dist. # _____ <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # _____ <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # <u>4</u> <input type="checkbox"/> Other _____

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <u> </u> <input type="checkbox"/> Mg <u> </u> <input type="checkbox"/> Fe Total <u> </u> <input type="checkbox"/> Mn <u> </u> <input type="checkbox"/> Na <u> </u> <input type="checkbox"/> K <u> </u> <input type="checkbox"/> pH <u> </u> <input type="checkbox"/> Total Dis-solved Solids <u> </u> <input type="checkbox"/> Hardness <u> </u> <input type="checkbox"/> HCO ₃ <u> </u> <input type="checkbox"/> CO ₃ <u> </u> <input type="checkbox"/> OH <u> </u> <input type="checkbox"/> Total Alk. <u> </u> <input type="checkbox"/> Cl <u> </u> <input type="checkbox"/> SO ₄ <u> </u> <input type="checkbox"/> F <u> </u> <input type="checkbox"/> NO ₃ <u> </u>		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al _____ <input type="checkbox"/> Ag _____ <input type="checkbox"/> As _____ <input type="checkbox"/> B _____ <input type="checkbox"/> Cd _____ <input type="checkbox"/> Cr _____ <input type="checkbox"/> Cu _____ <input type="checkbox"/> Hg _____ <input type="checkbox"/> Pb _____ <input type="checkbox"/> Ni _____ <input type="checkbox"/> Se _____ <input type="checkbox"/> Zn _____ <input type="checkbox"/> _____	<input type="checkbox"/> Other analyses desired (specify): <p style="text-align: center;">V.O.A * see attached sheet</p>
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/ 1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received <u>3/11/85</u> (Leave Blank)	Lab. No. <u>5708</u>
Name and Address of Owner, or Source <u>Southern Calif. Chem. Co.</u>		Collected By <u>FM/AAK</u>	Serial Number <u>R 33983</u>
Sampling Point <u>Southern Calif. Chem. Co. well #2</u>		County <u>LA</u>	Date and Time Collected <u>3/6/85, 11:30</u>
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) <u>g/w</u>			
Sample Size		Collection Period (Date and Time)	
Air: Finish _____		Finish _____	
Start _____		Start _____	
Net _____		Net _____	
Composite Sample:		Finish _____	
		Start _____	
<p>7.16 ± 2.55 pCi/l ✓ Alpha</p> <p>7.11 ± 3.37 pCi/l ✓ Gross Beta</p> <p style="text-align: center;">Radium</p> <p>send result to Hann Ten Southern Calif. Lab.</p>			

FORM LAB 803 (REV. 10-79)

VOA

COLLECTED

3/6/85 11AM

AN ATTACHMENT TO LAB-804

F. MELE

SAMPLES FOR CHEMICAL ANALYSIS

LAB NUMBER:

14383

WELL NO. 2 *

SERIAL NUMBER:

C 21157

ANALYST:

P.H.

DATE REPORTED:

3/8/85

VOC

1. 1,1 dichloroethylene = 1.7 ug/L ✓

2. methylene chloride = 1.1 ug/L

3. 1,1 dichloroethane = 2.2 ug/L

4. (C) 1,2 dichloroethylene = 9.2 ug/L

5. trichloroethylene = 15 ug/L ✓

6. Dimethyl disulphide

7. Dimethyl trisulphide

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

*Santa Anita Chem Co
Santa Anita Springs*

Sampling Point

well #2

Date Received

3-6-85

Lab. No.

14386

System Number

000000

Serial Number

C 21101

Collected by

FM/AIC

Date and Hour Collected

3/6/85 11:15

Type of Sample

☐ Raw Surface Water

☐ Drinking Water

☐ Raw

☐ Treated

☐ Waste water

☐ Raw

☐ Trade Waste

☐ Other

Send Report To

☐ WSS Dist. #

☐ DOT Dist. #

☒ RWQCB # *4*

☐ County HD

☐ National Park Serv.

☐ Other

Results are expressed as mg/l unless specified

☐ GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

☐ Ca

☐ Mg

☐ Fe Total

☐ Mn

☐ Na

☐ K

☐ pH

☐ Total Dissolved Solids

☐ Hardness

☐ HCO₃

☐ CO₃

☐ OH

☐ Total Alk.

☐ Cl

☐ SO₄

☐ F

☐ NO₃

TRACE ELEMENTS

☐ Al

☐ Ag

☐ As

☐ B

☐ Cd

☐ Cr

☐ Cu

☐ Hg

☐ Pb

☐ Ni

☐ Se

☐ Zn

☒ Other analyses desired (specify):

*Pesticides (group 2)
none detected
($< 0.1 \text{ ppb}$)*

Date Reported

3-28-85

Analyst

DT

☐ Turb. TU

☐ Spec. Cond. $\mu \text{ mhos/cm}$

☐ NH₃-N

☐ ORG-N

☐ BOD

☐ Grease

☐ Susp. Solids

☐ Set Solids ml/1/hour

☐ PO₄

☐ MBAS

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION
SAMPLE FOR MICROBIOLOGICAL EXAMINATION
PURVEYOR AND ADDRESS

DATE

TIME

LAB NO.

3/6/85 3:15

10080

COUNTY

DATE AND HOUR COLLECTED

LA

2/22, 3:30pm

SAMPLING POINT

SYSTEM NUMBER

COLLECTED BY

BOTTLE CAP NUMBER

well # 3

00X000

FM/AK

05201

TYPE OF SAMPLE:
☐ DRINKING WATER (ANY SOURCE)
☒ OTHER (SPECIFY) g/water

☐ SEWAGE ☐ RAW SURFACE WATER

SEND REPORT TO:

☐ SEB DIST ☐ COUNTY HD
☒ RWQCB # 4 ☐ OTHER

☐ NAT'L PARK

PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM
☐ SPC

☐ FECAL COLIFORM
☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	RESULTS
PORTIONS IN ML (LOGS)	1	1	1	1	1																COLIFORM/100ml
PRESUMPTIVE TEST	24	+	+	+	+	+															<input type="checkbox"/> MPN <input type="checkbox"/> MF
CONFIRMED TEST	24	+	+	+	+	+															FECAL COLIFORM/100ml
E. C.	24																				<input checked="" type="checkbox"/> MPN <input type="checkbox"/> MF <u>>16</u>
																					SPC/ml at 35C
																					Cl ₂ RES. mg/liter

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

ANALYST

NP

REV. 9/81 FORM LAB BOT
84717-449 12-81 SUM THE CAM O W OSP

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Calif. Chem. Co.
SFS Co.

Date Received

3-6-85

(Leave Blank)

Lab. No.

14388

System Number

00X000

Serial Number

C 21162

Sampling Point

well # 3

Collected by

AAK/FM

Date and Hour Collected

3/6/85
2/22, 3:15pm

Type of Sample

☐ Raw Surface Water ☐ Waste water:
☐ Drinking Water ☐ Raw ☐ Chlorinated
☐ Raw ☐ Trade Waste
☐ Treated ☒ Other g/w

Send Report To

☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWQCB # 4 ☐ Other

Results are expressed as mg/l unless specified

☒ GENERAL MINERAL ANALYSIS (mg/l as Ca CO₃)

<input type="checkbox"/> Ca <u>168.</u>	<input type="checkbox"/> Hardness <u>445.</u>
<input type="checkbox"/> Mg <u>6.</u>	<input type="checkbox"/> HCO ₃ <u>290.</u>
<input type="checkbox"/> Fe Total <u><0.05</u>	<input type="checkbox"/> CO ₃ <u>0.</u>
<input type="checkbox"/> Mn <u>0.6</u>	<input type="checkbox"/> OH <u>0.</u>
<input type="checkbox"/> Na <u>57.</u>	<input type="checkbox"/> Total Alk. <u>290.</u>
<input type="checkbox"/> K <u>3.</u>	<input type="checkbox"/> Cl <u>165.</u>
<input type="checkbox"/> pH <u>7.5</u>	<input type="checkbox"/> SO ₄ <u>200.</u>
Total Dissolved Solids <u>962</u>	<input type="checkbox"/> F <u>0.37</u>
	<input type="checkbox"/> NO ₃ <u>16.</u>

TRACE ELEMENTS

☐ Al <0.001
☒ Ag <0.001
☒ As <0.01
☐ B <0.001
☒ Cd <0.001
☒ Cr <0.01
☒ Cu <0.02
☒ Hg <0.001
☒ Pb <0.01
☒ Ni <0.05
☒ Se <0.001
☒ Zn <0.01
☒ Ba 0.11

☒ Other analyses desired (specify):

~~Phenols~~
Phenols = .015 mg/ml
Cr⁺⁶ = none detected
(<0.001 mg/l)

☐ Turb. TU 0.48
☒ Spec. Cond 1497
☐ NH₃-N 0.48
☐ ORG-N

☐ BOD
☐ Grease

☐ Susp. Solids
☐ Set Solids ml 1 hour

☐ PO₄
☐ MBAS

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-6-85	Lab. No. 14384
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern Calif. Chem. Co. S.F.S.		System Number 021181	Serial Number 021181
Sampling Point Well # 3		Collected by AAK/FM	Date and Hour Collected 2/22, 3:15pm
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Drinking Water <input type="checkbox"/> Trade Waste <input type="checkbox"/> Raw <input checked="" type="checkbox"/> Other g/water <input type="checkbox"/> Treated		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <input type="checkbox"/> Hardness <input type="checkbox"/> Mg <input type="checkbox"/> HCO ₃ <input type="checkbox"/> Fe Total <input type="checkbox"/> CO ₃ <input type="checkbox"/> Mn <input type="checkbox"/> OH <input type="checkbox"/> Na <input type="checkbox"/> Total Alk. <input type="checkbox"/> K <input type="checkbox"/> Cl <input type="checkbox"/> pH <input type="checkbox"/> SO ₄ <input type="checkbox"/> Total Dissolved Solids <input type="checkbox"/> F <input type="checkbox"/> NO ₃		TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input checked="" type="checkbox"/> Other analyses desired (specify): VOA See attached sheet
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION		Date Received 3/11/85	Lab. No. 5707
SAMPLE FOR RADIOLOGICAL ANALYSIS		(Leave Blank)	
Name and Address of Owner, or Source Southern Calif. Chem. Co.		Collected by FM/AK	Serial Number R 33978
Sampling Point Well 3		County LA	Date and Time Collected 2/22, 3:20pm
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) g/water			
Sample Size		Collection Period (Date and Time)	
Air: Finish _____		Finish _____	
Start _____		Start _____	
Net _____ M ³			
Composite Sample:		Finish _____	
		Start _____	
ANALYSIS 7.13 μR/hr Alpha 2.93 μR/hr Gross Beta Radium send result to Hiram Tan Southern Calif. Lab			

Form LAB 803 (REV. 10-79)

VOA

DATE COLLECTED

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

3/6/85 1415
HRS

LAB NUMBER:

14384

WELL NO. 3

SERIAL NUMBER:

C 21101

ANALYST:

P. H.

DATE REPORTED:

3/8/85

VOC

1. trichlorofluoromethane (probable)
2. 1,1 dichloroethylene = 5.0 $\mu\text{g}/\text{L}$
3. methylene chloride = 1.5 $\mu\text{g}/\text{L}$
4. 1,1 dichloroethane = 2.2 $\mu\text{g}/\text{L}$
5. (C) 1,2 dichloroethylene = 0.53 $\mu\text{g}/\text{L}$
6. chloroform = 29 $\mu\text{g}/\text{L}$
7. carbon tetrachloride = 37 $\mu\text{g}/\text{L}$
8. benzene = 1.4 $\mu\text{g}/\text{L}$
9. trichloroethylene = 154 $\mu\text{g}/\text{L}$
10. Dimethyl disulphide
11. Perchloroethylene = 0.4 $\mu\text{g}/\text{L}$
12. trichlorobenzene isomer

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Calif. Chem. Co.

Date Received

2-1-85

(Leave Blank)

Lab. No.

14385

System Number

000000

Serial Number

C 21076

Sampling Point

Well #3

Collected by

FM/AK

Date and Hour Collected

2/22/85, 3:30 PM

Type of Sample

☐ Raw Surface Water

☐ Waste water:

☐ Drinking Water

☐ Raw

☐ Chlorinated

☐ Raw

☐ Trade Waste

☐ Treated

☒ Other

g/water

Send Report To

☐ WSS Dist. #

☐ County HD

☐ DOT Dist. #

☐ National Park Serv.

☒ RWQCB #

4

☐ Other

Results are expressed as mg/l unless specified

☐ GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

☐ Ca

000

☐ Mg

000

☐ Fe Total

000

☐ Mn

000

☐ Na

000

☐ K

000

☐ pH

00

☐ Total Dis-solved Solids

0000

☐ Hard-ness

000

☐ HCO₃

000

☐ CO₃

000

☐ OH

000

☐ Total Alk.

000

☐ Cl

000

☐ SO₄

000

☐ F

00

☐ NO₃

000

TRACE ELEMENTS

☐ Al

☐ Ag

☐ As

☐ B

☐ Cd

☐ Cr

☐ Cu

☐ Hg

☐ Pb

☐ Ni

☐ Se

☐ Zn

☐

☒ Other analyses desired (specify):

Pesticides (group 2)
none detected
<0.1 ppb

Date Reported

3-28-85

Analyst

OT

☐ Turb. TU

☐ NH₃-N

☐ BOD

☐ Susp. Solids

☐ PO₄

☐ Spec. Cond. μ mhos/cm

☐ ORG-N

☐ Grease

☐ Set Solids ml/ 1/hour

☐ MBAS

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section SAMPLE FOR CHEMICAL ANALYSIS Purveyor and Address (include city and county) <i>Southern Chem. Co. SFS</i>		Date Received <i>3-11-85</i> (Leave Blank)	Lab. No. <i>14450</i>
Sampling Point <i>Well # 4</i>		System Number <i>000000</i>	Serial Number <i>C 21166</i>
Type of Sample <input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Treated		Collected by <i>AAK / FFA</i>	Date and Hour Collected <i>3/11/85, 1:42</i>
<input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other <i>g/w</i>		Send Report To <input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # <i>4</i> <input type="checkbox"/> Other	

Results are expressed as mg/l unless specified

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <i>980.</i> <input type="checkbox"/> Mg <i>24.</i> <input type="checkbox"/> Fe Total <i>0.95</i> <input type="checkbox"/> Mn <i>3.4</i> <input type="checkbox"/> Na <i>203.</i> <input type="checkbox"/> K <i>5.</i> <input type="checkbox"/> pH <i>6.2</i> <input type="checkbox"/> Total Dissolved Solids <i>5650</i> <input type="checkbox"/> Hardness <i>2550.</i> <input type="checkbox"/> HCO ₃ <i>502.</i> <input type="checkbox"/> CO ₃ <i>0.</i> <input type="checkbox"/> OH <i>0.</i> <input type="checkbox"/> Total Alk. <i>502.</i> <input type="checkbox"/> Cl <i>1700.</i> <input type="checkbox"/> SO ₄ <i>220.</i> <input type="checkbox"/> F <i>0.31</i> <input type="checkbox"/> NO ₃ <i>17.</i>		TRACE ELEMENTS <input type="checkbox"/> Al <input checked="" type="checkbox"/> Ag <i><0.001</i> <input checked="" type="checkbox"/> As <i><0.01</i> <input type="checkbox"/> B <input checked="" type="checkbox"/> Cd <i>0.560</i> <input checked="" type="checkbox"/> Cr <i>520</i> <input checked="" type="checkbox"/> Cu <i>0.02</i> <input checked="" type="checkbox"/> Hg <i>0.12</i> <input checked="" type="checkbox"/> Pb <i><0.01</i> <input checked="" type="checkbox"/> Ni <i>0.05</i> <input checked="" type="checkbox"/> Se <i><0.005</i> <input checked="" type="checkbox"/> Zn <i>0.05</i> <input checked="" type="checkbox"/> Ba	<input checked="" type="checkbox"/> Other analyses desired (specify): <i>Hex. Cr = 469 mg/l.</i> Phenols <i>Phenols = .001 mg/ml</i>
<input type="checkbox"/> Turb TU <input checked="" type="checkbox"/> Spec. Cond. <i>6619</i> μ mhos/cm	<input checked="" type="checkbox"/> NH ₃ -N <i>0.24</i> <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	Date Reported <i>4-1-85</i> <input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/l hour
Analyst <i>HL NPMOT</i>		<input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS	

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION

DATE 3/11/85 TIME 3:15 LAB NO. 10082

SAMPLE FOR MICROBIOLOGICAL EXAMINATION
PURVEYOR AND ADDRESS
Southern Calif. Chem. Co.
Sanita Fe Springs

COUNTY Los Angeles DATE AND HOUR COLLECTED 3/11/85, 1:40p

SAMPLING POINT well #4 SYSTEM NUMBER XX COLLECTED BY AAK BOTTLE CAP NUMBER

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER
☒ OTHER (SPECIFY) groundwater

SEND REPORT TO:
☐ SEB DIST ☐ COUNTY HD
☒ RWQCB # 4 ☐ OTHER
☐ NAT'L PARK
PHONE NO. ()

ANALYSES DESIRED AND REMARKS:
☐ COLIFORM ☐ FECAL COLIFORM
☐ SPC ☐ OTHER -1

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	RESULTS	
PORTIONS IN ML. (LOGS)	1	1	1	1	1																COLIFORM/100ml	
PRESUMPTIVE	24																				<input checked="" type="checkbox"/> MPN <u>75</u>	
TEST	48																				<input type="checkbox"/> MF	
CONFIRMED	24																				FECAL COLIFORM/100ml	
TEST	48																				<input type="checkbox"/> MPN	
E. C.	24																				<input type="checkbox"/> MF	
LABORATORY REMARKS <u>0-4-0</u> <u>w/1 ml</u>																					SPC/ml at 35C	C12 RES. mg/liter
<input type="checkbox"/> LEAKED IN TRANSIT <input type="checkbox"/> INSUFFICIENT SAMPLE																					ANALYST <u>RS</u>	<u>CL</u>

(REV. 9/81) FORM LAB 801
 84717-449 12-B1-50M TRIP-CAM © W. OSP

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

DATE RECEIVED 3-11-85 (Leave Blank) Lab. No. 14454

SAMPLE FOR CHEMICAL ANALYSIS
PURVEYOR AND ADDRESS (include city and county)
Southern Calif. Chem. Co.
SFS

System Number XX Serial Number C 21165

SAMPLING POINT Well #4 COLLECTED BY AK DATE AND HOUR COLLECTED 3/11/85, 1:30

TYPE OF SAMPLE: ☐ Raw Surface Water ☐ WASTE WATER: ☐ Raw ☐ Chlorinated
☐ Drinking Water ☐ Trade Waste ☒ Other g/water
☐ Raw ☐ Treated

SEND REPORT TO: ☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWQCB # 4 ☐ Other

Results are expressed as mg/l unless specified

☐ GENERAL MINERAL ANALYSIS (mg/l as Ca CO₃)

☐ Ca ☐ Hardness ☐ HCO₃ ☐ CO₃ ☐ OH ☐ Total Alk ☐ Cl ☐ SO₄ ☐ F ☐ NO₃

☐ Mg ☐ Fe Total ☐ Mn ☐ Na ☐ K ☐ pH ☐ Total Dissolved Solids

TRACE ELEMENTS

☐ Al ☐ Ag ☐ As ☐ B ☐ Cd ☐ Cr ☐ Cu ☐ Hg ☐ Pb ☐ Ni ☐ Se ☐ Zn

☒ Other analyses desired (specify): VOA
see attached list

DATE REPORTED 3-11-85 ANALYST PA

☐ Turb TU ☐ NH₃-N ☐ BOD ☐ Susp Solids ☐ PO₄

☐ Spec Cond μ mhos/cm ☐ ORG-N ☐ Grease ☐ Set Solids ml/hr ☐ MBAS

VOA

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

COLLECTED

3/11/85 1330 HRS

LAB NUMBER: 14454

SERIAL NUMBER: C 21165

ANALYST: P.H.

WELL # 4

DATE REPORTED: 3/12/85

VOC	
1. 1,1 dichloroethylene = 52 ug/L	15 Ethyl toluene isomer
2. Methylene chloride = 93 ug/L	
3. 1,1 dichloroethane = 41 ug/L	
4. (C) 1,2 dichloroethylene = 14 ug/L	
5. Chloroform = 24 ug/L	
6. 1,2 dichloroethane = 13 ug/L	
7. Benzene = 3.7 ug/L	
8. trichloroethylene = 225 ug/L	
9. Toluene = 4500 ug/L	
10. Ethyl benzene = 2100 ug/L	
11. m,p - Xylenes = 2000 ug/L	
12. o - Xylene = 1100 ug/L	
13. Cumene	
14. n-propyl benzene	

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SAMPLE FOR RADIOLOGICAL ANALYSIS

Name and Address of Owner, or Source

*Southern Calif Chem Co
San Jose Springs*

Sampling Point

Well #4

Date Received

3/11/85

Leave

Lab No.

5709

Blank

Serial Number

R 33979

Collected By

AAK

County

Los Angeles

Date and Time Collected

3/11/85 1:30 PM

Type of Sample:

☐ Air

☐ Sewage Effluent

☐ Sewage Sludge

☐ Milk

☐ Water

☒ Other (Specify)

Groundwater

Sample Size

Collection Period (Date and Time)

Air: Finish

Start

Net

Composite Sample:

Finish

Start

Finish

Start

8.93

7.43 pCi/l, Alpha

-0.53

13.43 pCi/l, Gross Beta

Radium

*send result to
HAM TAN
Southern Calif Lab.*

FORM LAB 803 (REV. 10-79)

© 1

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-11-85	Lab. No. 14452
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern Calif. Chemical Co. Santa Fe Springs		System Number 000000	Serial Number C 21103
Sampling Point Well #4		Collected by oak	Date and Hour Collected 3/11/85, 1:55pm
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other groundwater		
		Send Report To	<input type="checkbox"/> WSS Dist. # _____ <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # _____ <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other _____

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca _____ <input type="checkbox"/> Mg _____ <input type="checkbox"/> Fe Total _____ <input type="checkbox"/> Mn _____ <input type="checkbox"/> Na _____ <input type="checkbox"/> K _____ <input type="checkbox"/> pH _____ <input type="checkbox"/> Total Dissolved Solids _____ <input type="checkbox"/> Hardness _____ <input type="checkbox"/> HCO ₃ _____ <input type="checkbox"/> CO ₃ _____ <input type="checkbox"/> OH _____ <input type="checkbox"/> Total Alk. _____ <input type="checkbox"/> Cl _____ <input type="checkbox"/> SO ₄ _____ <input type="checkbox"/> F _____ <input type="checkbox"/> NO ₃ _____		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al _____ <input type="checkbox"/> Ag _____ <input type="checkbox"/> As _____ <input type="checkbox"/> B _____ <input type="checkbox"/> Cd _____ <input type="checkbox"/> Cr _____ <input type="checkbox"/> Cu _____ <input type="checkbox"/> Hg _____ <input type="checkbox"/> Pb _____ <input type="checkbox"/> Ni _____ <input type="checkbox"/> Se _____ <input type="checkbox"/> Zn _____ <input type="checkbox"/> _____	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides (group I) none detected < 0.1 µg/l
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. µmhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	Date Reported 3-28-85 <input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml./hour Analyst OT <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 2-22-85 (Leave Blank)	Lab. No. 14279
SAMPLE FOR CHEMICAL ANALYSIS Purveyor and Address (include city and county) Southern Calif. Chemical Co. SFS		System Number 000000	Serial Number C 21170
Sampling Point Well #5		Collected by AAK/FM	Date and Hour Collected 2/22, 10:15
Type of Sample <input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Treated	<input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other Groundwater	Send Report To <input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other	

Results are expressed as mg/l unless specified

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca 170 <input type="checkbox"/> Mg 38 <input type="checkbox"/> Fe Total <0.05 <input type="checkbox"/> Mn 1.25 <input type="checkbox"/> Na 72 <input type="checkbox"/> K 4 <input type="checkbox"/> pH 7.3 <input type="checkbox"/> Total Dissolved Solids 974 <input type="checkbox"/> Hardness 582 <input type="checkbox"/> HCO ₃ 313 <input type="checkbox"/> CO ₃ 0 <input type="checkbox"/> OH 0 <input type="checkbox"/> Total Alk. 313 <input type="checkbox"/> Cl 72 <input type="checkbox"/> SO ₄ 295 <input type="checkbox"/> F 0.36 <input type="checkbox"/> NO ₃ 47		<input checked="" type="checkbox"/> TRACE ELEMENTS <input checked="" type="checkbox"/> Al <0.001 <input checked="" type="checkbox"/> Ag <0.001 <input type="checkbox"/> As <0.001 <input type="checkbox"/> B <0.001 <input checked="" type="checkbox"/> Cd <0.001 <input checked="" type="checkbox"/> Cr <0.01 <input checked="" type="checkbox"/> Cu <0.01 <input checked="" type="checkbox"/> Hg <0.001 <input checked="" type="checkbox"/> Pb <0.01 <input checked="" type="checkbox"/> Ni <0.05 <input checked="" type="checkbox"/> Se <0.01 <input checked="" type="checkbox"/> Zn <0.02 <input checked="" type="checkbox"/> Ba <0.01	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides and Phenols = .005 ug/ml Cr +6 = <0.001 mg/l
<input type="checkbox"/> Turb. TU <input checked="" type="checkbox"/> Spec. Cond. 1378 μ mhos/cm	<input checked="" type="checkbox"/> NH ₃ -N 1.20 <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

Form LAB-800 (2-80)

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 2-22-85 (Leave Blank)	Lab. No. 14278
SAMPLE FOR CHEMICAL ANALYSIS Purveyor and Address (include city and county) Southern Calif. Chem. Co		System Number 000000	Serial Number C 21824
Sampling Point Well #5		Collected by AK/FM	Date and Hour Collected 2/22, 10:15
Type of Sample <input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Treated	<input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other g/w	Send Report To <input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other	

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca 0 <input type="checkbox"/> Mg 0 <input type="checkbox"/> Fe Total 0 <input type="checkbox"/> Mn 0 <input type="checkbox"/> Na 0 <input type="checkbox"/> K 0 <input type="checkbox"/> pH 0 <input type="checkbox"/> Total Dissolved Solids 0 <input type="checkbox"/> Hardness 0 <input type="checkbox"/> HCO ₃ 0 <input type="checkbox"/> CO ₃ 0 <input type="checkbox"/> OH 0 <input type="checkbox"/> Total Alk. 0 <input type="checkbox"/> Cl 0 <input type="checkbox"/> SO ₄ 0 <input type="checkbox"/> F 0 <input type="checkbox"/> NO ₃ 0		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides none detected Gr. 1 (< 0.2 %)
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

Form LAB-800 (2-80)

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 2-22-85	Lab. No. 14277
SAMPLE FOR CHEMICAL ANALYSIS Purveyor and Address (include city and county) Southern Calif. Chem Co.		System Number 0000	Serial Number C 21169
Sampling Point Well # 5		Collected by AAK/FM	Date and Hour Collected 2/22, 10 AM
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other Ground Water		
		Send Report To	<input type="checkbox"/> WSS Dist. # _____ <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # _____ <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other _____

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg. as Ca CO ₃) <input type="checkbox"/> Ca _____ <input type="checkbox"/> Mg _____ <input type="checkbox"/> Fe Total _____ <input type="checkbox"/> Mn _____ <input type="checkbox"/> Na _____ <input type="checkbox"/> K _____ <input type="checkbox"/> pH _____ <input type="checkbox"/> Total Dis-solved Solids _____ <input type="checkbox"/> Hard-ness _____ <input type="checkbox"/> HCO ₃ _____ <input type="checkbox"/> CO ₃ _____ <input type="checkbox"/> OH _____ <input type="checkbox"/> Total Alk. _____ <input type="checkbox"/> Cl _____ <input type="checkbox"/> SO ₄ _____ <input type="checkbox"/> F _____ <input type="checkbox"/> NO ₃ _____		TRACE ELEMENTS <input type="checkbox"/> Al _____ <input type="checkbox"/> Ag _____ <input type="checkbox"/> As _____ <input type="checkbox"/> B _____ <input type="checkbox"/> Cd _____ <input type="checkbox"/> Cr _____ <input type="checkbox"/> Cu _____ <input type="checkbox"/> Hg _____ <input type="checkbox"/> Pb _____ <input type="checkbox"/> Ni _____ <input type="checkbox"/> Se _____ <input type="checkbox"/> Zn _____ <input type="checkbox"/> _____	<input checked="" type="checkbox"/> Other analyses desired (specify): <div style="text-align: center; font-size: 1.5em;">V.O.A</div> <div style="text-align: center;">see attached sheet</div>
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	Date Reported 2-22-85 Analyst P.H. <input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/1/85	Lab. No. 5706
Name and Address of Owner, or Source Southern Calif. Chem Co.		Collected By AK/FM	Serial Number R 33977
Sampling Point Well # 5		County LA	Date and Time Collected 2/22 10:20
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) g/l			
Sample Size	Collection Period (Date and Time)		
Air: Finish _____	Finish _____	6.24 ± 0.48 pCi/l α Alpha 5.14 ± 0.04 pCi/l β Gross Beta Radium Send result to Hiam Tan Southern Calif. Lab	
Start _____	Start _____		
Net _____ M ³			
Composite Sample:	Finish _____		
	Start _____		

FORM LAB 803 (REV. 10-79)

VOA

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

COLLECTED

2/22/85 1000 HRS

LAB NUMBER: 14277

SERIAL NUMBER: C 21169

WELL NO. 5

ANALYST: P.H.

DATE REPORTED: 2/22/85

VOA

1. 1,1 Dichloroethylene = 1.1 $\mu\text{g/l}$
2. methylene chloride = 6.2 $\mu\text{g/l}$
3. 1,1 dichloroethane = 1.0 $\mu\text{g/l}$
4. Chloroform = 6.0 $\mu\text{g/l}$
5. Carbon tetrachloride = 8.2 $\mu\text{g/l}$
6. trichloroethylene = 43 $\mu\text{g/l}$
7. Perchloroethylene = 1.2 $\mu\text{g/l}$

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION

DATE

TIME

LAB NO.

3-12-85 1200

10093

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

LABORATORY USE ONLY

PURVEYOR AND ADDRESS

Southern Calif. Chem. Co.

COUNTY

LA

DATE AND HOUR COLLECTED

3/12/85 11:45

SAMPLING POINT

Well # 6B

SYSTEM NUMBER

000X000

COLLECTED BY

AAK

BOTTLE CAP NUMBER

04148

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☒ OTHER (SPECIFY) g/w

SEND REPORT TO:

☐ SEB DIST ☐ COUNTY HD ☒ RWQCB # 4 ☐ NAT'L PARK ☐ OTHER ☐ PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☐ FECAL COLIFORM ☐ SPC ☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	RESULTS
PORTIONS IN ML. (LOGS)	1	1	1	1	1																COLIFORM/100ml
PRESUMPTIVE TEST	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	<input checked="" type="checkbox"/> MPN 724000
CONFIRMED TEST	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	<input type="checkbox"/> MF
E. C.	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	FECAL COLIFORM/100ml
																					<input type="checkbox"/> MPN
																					<input type="checkbox"/> MF
																					SPC/ml at 35C
																					C1: RES. mg/liter
																					ANALYST
																					RS 3-14-85

LABORATORY REMARKS

☐ LEAKED IN TRANSIT ☐ INSUFFICIENT SAMPLE

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

Date Received

3-12-85

Lab. No.

14459

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Calif. Chem. Co.
Santa Fe Springs Co.

System Number

000X000

Serial Number

C 21106

Sampling Point

MAGSAY ATISA
Well # 6B

Collected by

AAK

Date and Hour Collected

3/12/85, 11:40

Type of Sample: ☐ Raw Surface Water ☒ Waste water: ☐ Raw ☐ Chlorinated ☐ Trade Waste ☒ Other g/w ☐ Drinking Water ☐ Raw ☐ Treated

Send Report To

☐ WSS Dist. # ☐ County HD ☐ DOT Dist. # ☐ National Park Serv. ☒ RWQCB # 4 ☐ Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <input type="checkbox"/> Hargness <input type="checkbox"/> HCO ₃ <input type="checkbox"/> CO ₃ <input type="checkbox"/> OH <input type="checkbox"/> Total Alk. <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> F <input type="checkbox"/> NO ₃ <input type="checkbox"/> Mg <input type="checkbox"/> Fe Total <input type="checkbox"/> Mn <input type="checkbox"/> Na <input type="checkbox"/> K <input type="checkbox"/> pH <input type="checkbox"/> Total Dis-solved Solids		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides (group I) 0.55 µg/l 11' DDT 0.20 " 11' DDE
<input type="checkbox"/> Turb TU <input type="checkbox"/> NH ₃ -N <input type="checkbox"/> BOD <input type="checkbox"/> Susp Solids <input type="checkbox"/> PO ₄ <input type="checkbox"/> Spec Cond µmhos/cm <input type="checkbox"/> ORG-N <input type="checkbox"/> Grease <input type="checkbox"/> Set Solids ml. 1 hour <input type="checkbox"/> MBAS	Date Reported 3-28-85 Analyst OT		

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

*Southern Calif. Water Co
Santa Fe Springs*

Sampling Point

Well # 6B

Date Received

3-19-85

Lab. No.

14-161

System Number

000000

Serial Number

C 21105

Collected by

AAK

Date and Hour Collected

3/12/85, 11:30 AM

Type of Sample

- ☐ Raw Surface Water ☐ Waste water:
☐ Drinking Water ☐ Raw ☐ Chlorinated
☐ Raw ☐ Trade Waste *9/1W*
☐ Treated ☒ Other

Send Report To

- ☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWQCB # *4* ☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS	
(mg/l as Ca CO ₃)	
<input type="checkbox"/> Ca <i>23.</i>	<input type="checkbox"/> Hardness <i>490.</i>
<input type="checkbox"/> Mg <i>23.</i>	<input type="checkbox"/> HCO ₃ <i>278.</i>
<input type="checkbox"/> Fe Total <i>0.05</i>	<input type="checkbox"/> CO ₃ <i>0.</i>
<input type="checkbox"/> Mn <i>0.45</i>	<input type="checkbox"/> OH <i>0.</i>
<input type="checkbox"/> Na <i>74.</i>	<input type="checkbox"/> Total Alk. <i>278.</i>
<input type="checkbox"/> K <i>6.</i>	<input type="checkbox"/> Cl <i>82.</i>
<input type="checkbox"/> pH <i>7.7</i>	<input type="checkbox"/> SO ₄ <i>305.</i>
<input type="checkbox"/> Total Dissolved Solids <i>935</i>	<input type="checkbox"/> F <i>0.30</i>
	<input type="checkbox"/> NO ₃ <i>29.</i>

TRACE ELEMENTS

- ☐ Al *0.001*
☒ Ag *0.001*
☒ As *0.007*
☐ B *0.001*
☒ Cd *0.042*
☒ Cr *0.20*
☒ Cu *0.006*
☒ Hg *0.01*
☒ Pb *0.05*
☒ Ni *0.01*
☒ Se *0.03*
☒ Zn *0.112*

☒ Other analyses desired (specify):

Hex Cr. Nme. det. at. <0.01 mg/l
Phenols = 0.001 mg/l

<input type="checkbox"/> Turb. TU	<input checked="" type="checkbox"/> NH ₃ -N <i>0.3</i>	<input type="checkbox"/> BOD	<input type="checkbox"/> Susp. Solids	<input type="checkbox"/> PO ₄
<input checked="" type="checkbox"/> Spec. Cond. <i>1338</i>	<input type="checkbox"/> ORG-N	<input type="checkbox"/> Grease	<input type="checkbox"/> Set Solids ml/1/hour	<input type="checkbox"/> MBAS

Date Reported

3-29-85

Analyst

STP MO HL

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-12-85	Lab. No. 14460
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern Calif. Chem. Co. Santa Fe Springs		System Number 000000	Serial Number C 21104
Sampling Point Well # 6B		Collected by AAK	Date and Hour Collected 3/12/85, 11:30
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Treated	<input type="checkbox"/> Waste water: <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other g/w	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> DOT Dist. # <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> County HD <input type="checkbox"/> National Park Serv. <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <input type="checkbox"/> Mg <input type="checkbox"/> Fe Total <input type="checkbox"/> Mn <input type="checkbox"/> Na <input type="checkbox"/> K <input type="checkbox"/> pH <input type="checkbox"/> Total Dissolved Solids		<input type="checkbox"/> Hardness <input type="checkbox"/> HCO ₃ <input type="checkbox"/> CO ₃ <input type="checkbox"/> OH <input type="checkbox"/> Total Alk. <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> F <input type="checkbox"/> NO ₃	TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input checked="" type="checkbox"/> Other analyses desired (specify): <p style="text-align: center;">V.O.A See attached sheet.</p>
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm	<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/1/hour	Date Reported 3-13-85 Analyst P.H.

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/13/85	Lab. No. 5711
Name and Address of Owner, or Source Southern Calif. Chem. Co. Santa Fe Springs		Collected By AAK	Serial Number R 33981
Sampling Point Well # 6B		County LA	Date and Time Collected 3/12/85
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) groundwater			
Sample Size	Collection Period (Date and Time)	5.81 ✓ + 2.25 pCi/l 2 Alpha 6.37 ✓ + 3.01 pCi/l 2 Gross Beta	
Air: Finish	Finish	Radium Send result to: HAM TAN - Southern Calif. Lab.	
Start	Start		
Net			
Composite Sample:	Finish		
	Start		

FORM LAB 803 (REV. 10-79)

VOA

COLLECTED

AN ATTACHMENT TO LAB-804

3/12/85

SAMPLES FOR CHEMICAL ANALYSIS

1130 ARS

LAB NUMBER: 14460 WELL #6B
SERIAL NUMBER: C 21104
ANALYST: P.H.
DATE REPORTED: 3/13/85

VOC	
1. Methylene chloride = 24 ug/L	15. sec-butyl benzene
2. Petroleum distillate aliphatic hydrocarbons C ₇ - C ₁₁	16. Decahydronaphthalene (probably)
3. trichloroethylene = 17 ug/L	17. Methyl Indan isomers
4. trimethyl cyclopentane isomers	18. Ethyl Xylene isomers
5. Toluene = 1.6 ug/L	19. Dimethyl Indan isomers
6. tetramethyl cyclopentane isomers	20. Decahydro-2-methylnaphthalene
7. Dimethyl cyclohexane isomers	21. tetramethyl benzene isomers
8. trimethyl cyclohexane isomers	22. Diethylmethyl benzene
9. Ethyl-methyl cyclohexane isomers	23. tert-amyl benzene
10. Ethyl benzene = 0.90 ug/L	24. trimethyl Indan isomers
11. m,p-Xylenes = 1.2 ug/L	
12. o-Xylene = 0.45 ug/L	
13. octahydro-2-methylpentabenzene (probably)	
14. octahydroindene (probably)	

SOUTHERN CALIFORNIA CHEMICAL CO.
8851 DICE ROAD
SANTE FE SPRINGS , CA. 90670



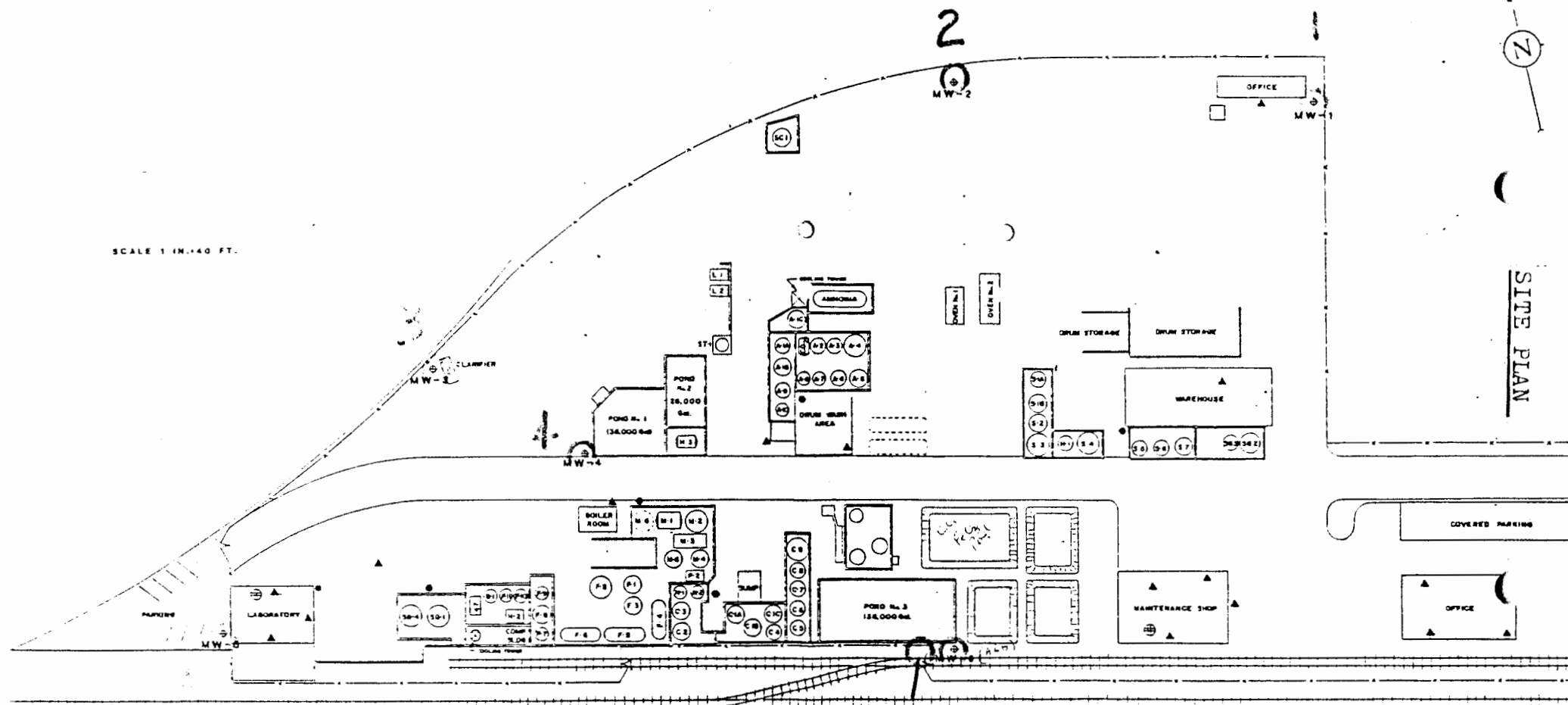
- FIRST AID STATION
- SAFETY SHOWER
- AIR RICKET

LEGEND

MW-2 MONITORING WELL # 2

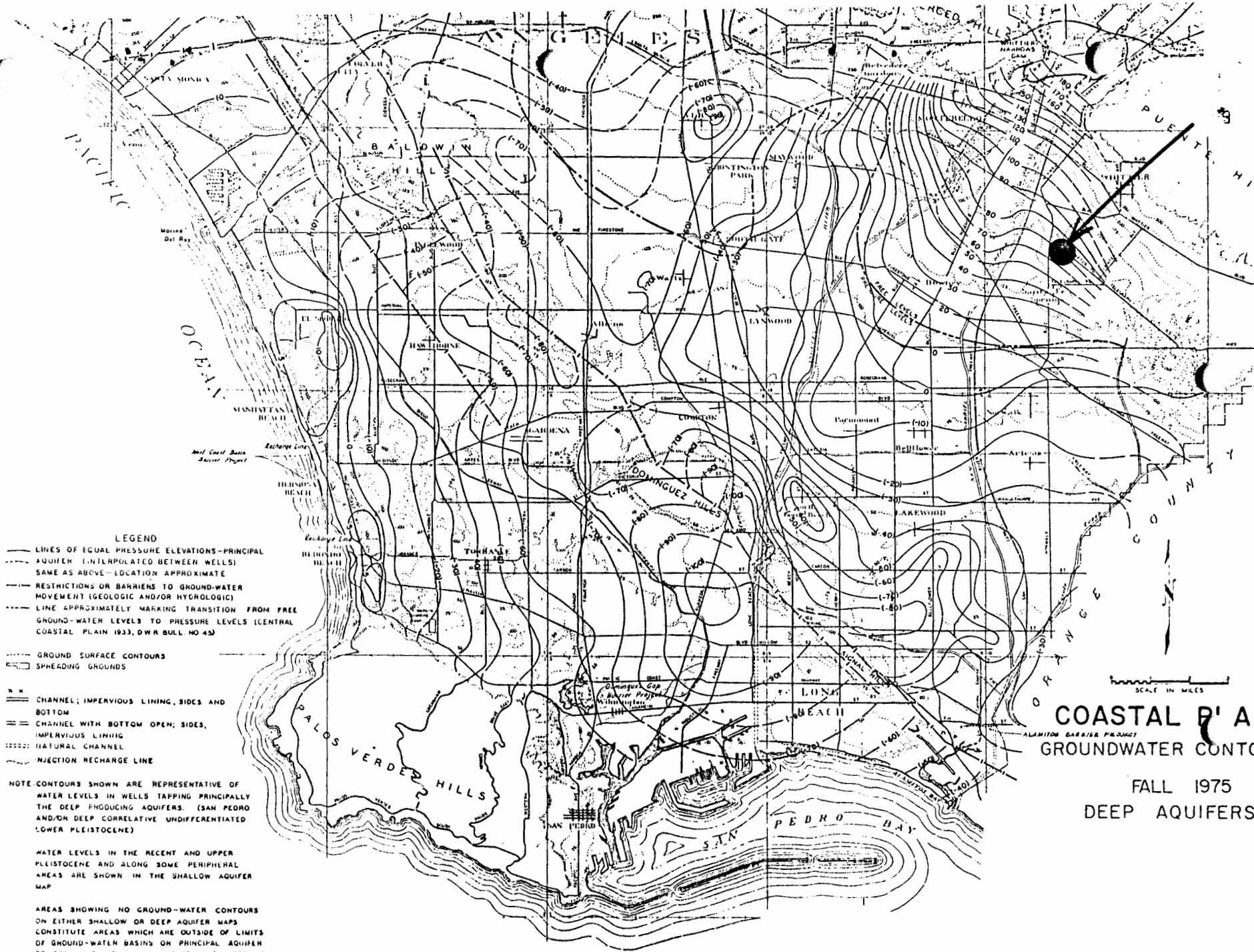
SOUTHERN CALIFORNIA CHEMICAL CO. MONITORING WELL LOCATIONS

SCALE 1 IN. = 40 FT.



6B

GA - NOT PRODUCTIVE



LEGEND

— LINES OF EQUAL PRESSURE ELEVATIONS—PRINCIPAL AQUIFER (INTERPOLATED BETWEEN WELLS)
 --- SAME AS ABOVE—LOCATION APPROXIMATE

— RESTRICTIONS OR BARRIERS TO GROUND-WATER MOVEMENT (GEOLOGIC AND/OR HYDROLOGIC)
 --- LINE APPROXIMATELY MARKING TRANSITION FROM FREE GROUND-WATER LEVELS TO PRESSURE LEVELS (CENTRAL COASTAL PLAIN 1933, DWR BULL. NO. 45)

--- GROUND SURFACE CONTOURS
 [Symbol] SPREADING GROUNDS

[Symbol] CHANNEL; IMPERVIOUS LINING, SIDES AND BOTTOM
 [Symbol] CHANNEL WITH BOTTOM OPEN; SIDES, IMPERVIOUS LINING
 [Symbol] NATURAL CHANNEL
 [Symbol] RECHARGE LINE

NOTE CONTOURS SHOWN ARE REPRESENTATIVE OF WATER LEVELS IN WELLS TAPPING PRINCIPALLY THE DEEP PRODUCING AQUIFERS. (SAN PEDRO AND/OR DEEP CORRELATIVE UNDIFFERENTIATED LOWER PLEISTOCENE)

WATER LEVELS IN THE RECENT AND UPPER PLEISTOCENE AND ALONG SOME PERIPHERAL AREAS ARE SHOWN IN THE SHALLOW AQUIFER MAP

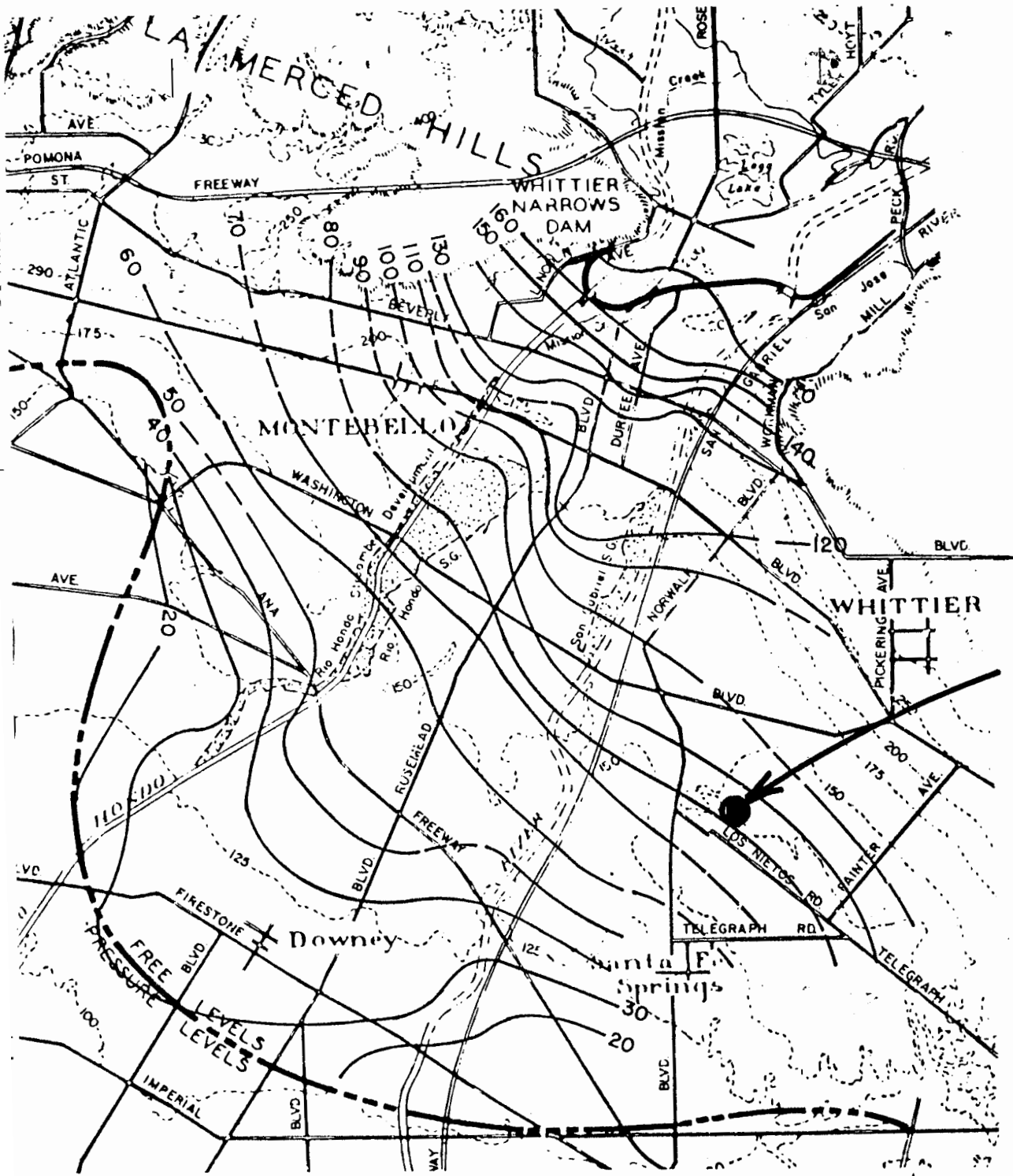
AREAS SHOWING NO GROUND-WATER CONTOURS ON EITHER SHALLOW OR DEEP AQUIFER MAPS CONSTITUTE AREAS WHICH ARE OUTSIDE OF LIMITS OF GROUND-WATER BASINS OR PRINCIPAL AQUIFER OR FOR WHICH THERE IS INSUFFICIENT INFORMATION.

SCALE IN MILES

COASTAL PLAIN
 ALAMITOS BARRIERS PROJECT
 GROUNDWATER CONTOUR

FALL 1975
 DEEP AQUIFERS

APPROXIMATE LOCATION OF
 SOUTHERN CALIFORNIA CHEMICAL CO.



LEGEND

- LINES OF FREE GROUND WATER ELEVATION OR PRESSURE (APPROXIMATE).
- - - SAME AS ABOVE ESTIMATED.
- +— GEOLOGIC LIMITATION TO GROUND WATER MOVEMENT.
- - -+— TRANSITION LINES FROM FREE TO PRESSURE GROUND WATER LEVEL (APPROXIMATE) (D.W.R. BULLETIN NO. 45).
- - - TOPOGRAPHIC CONTOURS.
- [Symbol] SPREADING GROUNDS.
- ==X== REACH OF RISING WATER.
- == CHANNEL; IMPERVIOUS LINING SIDES AND BOTTOM.
- == CHANNEL WITH OPEN BOTTOM AND IMPROVED SIDES.
- [Symbol] NATURAL STREAMBED.

APPROXIMATE LOCATION OF SOUTHERN CAL. CHEM. CO.



LOS ANGELES COUNTY FLOOD CONTROL DISTRICT

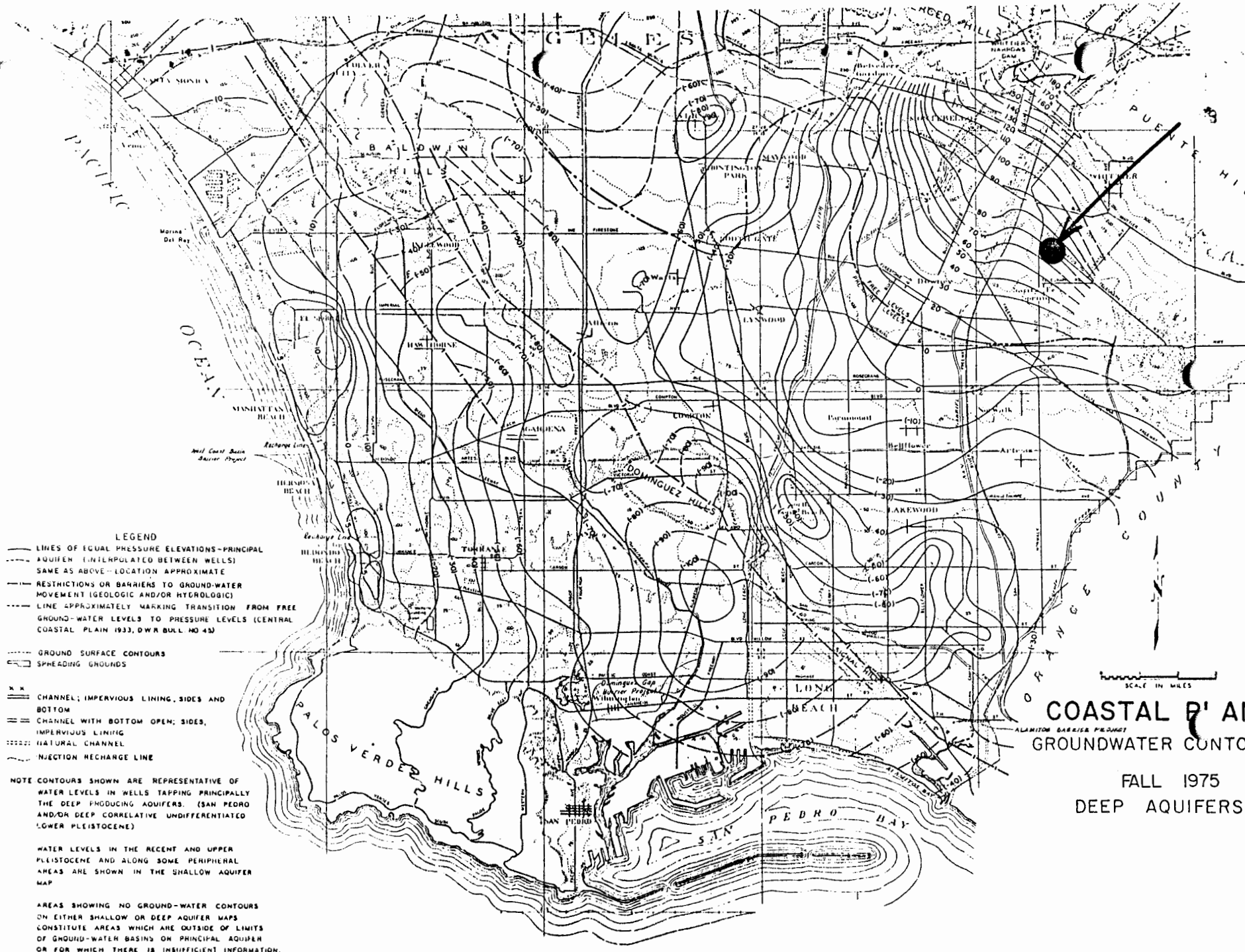
MONTEBELLO FOREBAY

GROUND WATER CONTOURS

SHALLOW AQUIFER

FALL 1976

SCALE as shown	PREPARED G. F.	DATE
-------------------	-------------------	------



Memorandum

To : Mr. John Adams
State Water Resources Control Board
Division of Water Quality

Date : June 25, 1986

File : 120-RCRA

From : CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD — LOS ANGELES REGION
107 South Broadway, Room 4027, Los Angeles, CA 90012-4596
Telephone: ATSS 640-4460 : (213) 620-4460

Subject: COMPREHENSIVE GROUND WATER MONITORING EVALUATION AT SOUTHERN CALIFORNIA
CHEMICAL COMPANY (SCCC) — SANTA FE SPRINGS
EPA ID NUMBER: CAD008488025

Transmitted herewith is the Comprehensive Monitoring Evaluation (CME) report
for the SCCC, Santa Fe Springs.

Field inspection and ground water sampling were conducted on March 25, 1986,
and March 18 thru March 20, 1986, respectively.

If you have any questions, please call Athar Khan at ATSS 640-5439.



RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

AK:sm1

Enclosures

DWQ Rec'd
JUN 26 1986

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

Annual RCRA Ground Water Monitoring Inspection and Evaluation Report
(F.Y. 1985-86)

Facility Name: Southern California Chemical Company, Inc.

Facility Location: 8851 Dice Road, Santa Fe Springs
California

EPA, I.D. Number: CAD008488025

Type of Inspection: RCRA Comprehensive Monitoring Evaluation Inspection
(CME)

Date of Inspection: March 25, 1986

Facility Representative: Tere King - Telephone (213) 723-4614

RWQCB Inspector: Athar A. Khan - Telephone (213) 620-5439

Accompanied By: Chuck Stultz (DOHS-TSCD)
Baron Peeler (DOHS-TSCD)
Telephone (213) 620-2380

TABLE OF CONTENTS

<u>Item</u>	<u>Page</u>
Introduction.....	1
Pre-Inspection Planning and Record Review.....	1
Facility Description.....	1
Site Geology and Hydrogeology.....	2
Ground Water Monitoring System.....	5
Ground Water Monitoring Data.....	5
Discussions of RCRA Regulated Pond 1..... Closure Status	6
Facility RCRA Assessment Status.....	6
Evaluation.....	8

LIST OF APPENDICES

- Appendix A - Review of Hydrogeologic Report and Written Ground Water Monitoring Program (CME Checklist)
- Appendix B - Field Review of Hazardous Waste Disposal Site to Determine Compliance with Ground Water Monitoring Requirements (CME Checklist)
- Appendix C - Facility Location Map
- Appendix D - Ground Water Monitoring Well and Pond 1 Location Map
- Appendix E - Regional Cross-Section and Site Fence Diagram (Geologic) - Aquifer Test Data for MW-4
- Appendix F - Ground Water Elevation Contour Maps
- Appendix G - Chemical Used in Pond 1 and Wastewater Neutralization System Processes
- Appendix H - Typical Well Configuration, Boring Logs and Construction Drawings
- Appendix I - Soil Boring Location and Soil Analysis Data
- Appendix J - First Year (1985) RCRA Ground Water Detection Monitoring Data (Split Sampling)
- Appendix K - RCRA Assessment /Verification Monitoring - Ground Water Analysis Data (Split Sampling)
- Appendix L - Regional Board Staff Comments and Recommendations to DOHS on RCRA Pond Closure Plan and Report on Hydrogeologic Assessment of the Pond

Introduction

On March 25, 1986, Regional Board staff in coordination with Department of Health Services (DOHS) staff conducted a Comprehensive Monitoring Evaluation (CME) inspection at Southern California Chemical Company (SCCC). An on-site evaluation and interview with SCCC representatives took place on March 18, 1986. Ground water sampling (split sampling) of the facility's on-site ground water monitoring wells was conducted from March 18 thru March 20, 1986, with SCCC's consultant, Kleinfelder and Associates.

The purpose of the CME inspection was to review the facility's ground water monitoring program and to determine the compliance of the facility's ground water monitoring program pursuant to RCRA 40CFR Part 265, Subpart F requirements.

Pre-Inspection planning and Record Review

The initial inspection planning and scheduling was coordinated by Regional Board staff with David Chase DOHS' RCRA contact, and final planning of the facility inspection was coordinated with Chuck Stultz and Baron Peeler of DOHS on March 11, 1986.

Prior to the CME inspection, the following documents pertaining to the facility RCRA ground water monitoring system were reviewed and discussed with DOHS staff:

1. Facility's RCRA files including the facility Interim Status Document (ISD), and RCRA Part A Application.
2. Facility's written ground water monitoring program including sampling and analysis protocols.
3. Facility's Pond 1 (RCRA regulated) closure plan.
4. The Hydrogeologic Assessment of Pond 1.
5. The RWQCB historic NPDES files.
6. The Ground Water Technical Enforcement Guidance Document (EPA Draft Document).

Facility Description

SCCC is located in the City of Santa Fe Springs and has been at its present address for 25 years. This Facility covers an area of about 1.8 acres. The facility location map is included in Appendix C. The Santa Fe Springs facility is an original manufacturer of patented and proprietary inorganic chemicals for electronic and printed circuitry, plating, water treatment and agricultural uses. Chemicals manufactured on-site include liquid copper sulfates, copper oxides, copper chlorides, ferric chloride, and other proprietary formulations including a line of patented ammonia etchants. Chemicals currently used on-site in the manufacturing processes

include, but are not limited to ammonia, iron, copper chemicals, hydrochloric acid, sulfuric acid and other inorganic compounds.

The facility had a RCRA regulated wastewater storage and treatment impoundment (Pond 1) which required a ground water monitoring system by their RCRA Interim Status Document (ISD) permit issued by DOHS. Pond 1 was a 36,000-gallon capacity (37' x 37' approximately 3' deep) treatment pond located approximately in the center of the facility (see Appendix D). The pond was constructed in 1975 of 6-inch thick reinforced concrete. Waste streams composed of the chemicals listed in Appendix G were discharged periodically into the pond. Appendix G also presents some potential chemical interaction, and quantities and frequencies of chemicals put in the pond. Sludges from the pond were periodically removed and disposed of to a legal disposal site. The pond was also used as a neutralization and treatment pond and the pH of the wastewater was maintained above 6, usually in the 12 to 13 range. The treated effluent was then discharged to Los Angeles County Sanitation District's sewer system through a 4" underground pipe. In July 1985, the use of the pond was discontinued and the free liquid and sludges were hauled to a class I disposal site. The pond closure was completed by submitting a closure plan on July 30, 1985. At present the pond is used as a bermed containment area for the two above-ground tanks. These tanks receive the wastewater prior to neutralization and then it is discharged to the sanitary sewer system.

Site Geology and Hydrogeology:

Southern California Chemical Inc.'s Santa Fe Springs facility is located in Section 31 of Township 2 South, Range 11 West (San Bernardino Base meridian), within the Santa Fe Springs Plain area of the coastal plain of Los Angeles County, California. The Santa Fe Springs Plains is a low, slightly rolling topographic feature that has been warped by the Santa Fe Springs-Coyote Hills anticlinal system. This plain dips gently both to the northeast toward Whittier and to the southwest toward the Downey Plain with an elevation difference that ranges between 175 and 200 feet above sea level.

The site is located on upper Pleistocene alluvium of the Lakewood Formation. The Lakewood Formation unconformably overlies the lower Pleistocene San Pedro formation, the Pliocene Pico and Repetto formations, and the Miocene Puente formation. Beneath the site, only the Lakewood and the San Pedro formations contain fresh water bearing units. Regional cross sections, a site fence diagram and aquifer test data for monitoring well MW-4 is included in Appendix E.

The site area is located on surface exposure of the Bellflower Aquiclude, a low permeability portion of the Lakewood formation. This late Pleistocene alluvial formation is approximately 15 to 20 feet thick and consists of clays, silts, silty clays and sandy clays at this location. The Gage Aquifer underlies this and is approximately 15 to 20 feet thick, consisting of fine to medium sands in this area. This aquifer is dry beneath the SCC site. On-site borings indicate that the bottom of the Gage

is actually at approximately 30 to 35 feet. All the borings drilled on-site encountered a clay to silty clay layer beneath the Gage. This is most likely the top of the uppermost aquiclude of the San Pedro Formation. This aquiclude is approximately 15 to 25 feet thick and serves to separate the Gage Aquifer from the Jefferson Aquifer. The Jefferson Aquifer underlies this aquiclude and is the uppermost waterbearing aquifer beneath the site. All water samples were obtained from this aquifer. The general regional flow of ground water in the area is to the south to southwest. The water levels measured in the monitoring wells indicate a site-specific flow to the south-southwest. Appendix F illustrate the approximate water level contours and flow direction based on the data generated during the assessment phase.

The following production wells are located within a one-mile radius of the site:

<u>State Well Number</u>	<u>Owner</u>
2S/11W - 29 E05	Apex Bulk Commodities Associates of Los Nietos
2S/11 - 30Q05	Mutual Water Owners Associates of Los Nietos
2S/11W - 30R03	City of Santa Fe Springs
3S/11W - 32J04	Whittier Union High School

The only chemical data available for the above wells is a General Mineral analysis for Well Number 2S/11W - 30R03.

Aquifer Parameter Evaluation

An aquifer test was performed to evaluate the aquifer transmissivity, permeability and storage coefficient. These parameters were evaluated for subsequent use in predictive equations of aquifer yield and drawdown.

Step Drawdown Test

A step drawdown test was performed prior to the aquifer test to:

1. Determine the proper pumping rate for the aquifer test.
2. Observe pumping rate/drawdown relationships, and
3. Estimate specific capacities.

The test was performed on August 19, 1985 using monitoring well 9. A four-inch Goulds submersible pump was used for the test. The pump inlet was set at 65 feet depth. Drawdown in the pumping well was monitored with a conductivity-based water level indicator. A rotometer was used to monitor the

discharge from the pump. Discharge from the pump was piped into a storage tank, treated, then piped into the sanitary sewer system.

Table in Appendix E summarizes the data from the test. Plots of the time drawdown data measured in the tests for MW-4 are also included in Appendix E. As shown in the Table in Appendix E, two pumping rates were used in the test.

The test was terminated after 110 minutes of pumping at up to 35 gpm.

Aquifer Test

The aquifer test was performed on August 29, 1985. The constant rate pumping test was conducted using monitoring well 9 for pumping and monitoring wells 4, 8 and 10 for drawdown monitoring. Water levels in the pumped well and the monitoring well were measured with a conductivity-based water level measurement indicator. Prior to the start of the test, water levels in all monitoring wells at Southern California Chemical Inc. were measured and recorded.

A four-inch Gould, submersible pump was used to pump an average of 25.4 gpm. The inlet of the pump was set at a depth of 65 feet. The discharge rate reading on the rotometer was checked by timing the filling of a barrel of known volume.

Pumping was carried out for 4 hours and 10 minutes, at which time near steady state was achieved in the pumping well and in the monitoring wells. Recovery was monitored and required 120 minutes in monitoring well 10.

The time-drawdown data from monitoring wells 4, 8 and 10 were plotted for analysis by the Theis curve matching and Jacob-Cooper approximation. The plots and subsequent calculations are shown in Appendix E of this report.

The results show transmissivity values ranging from 32,057 to 44,694 gpd/ft. The average value among these methods is 40,000 gpd/ft. Transmissivity was not calculated for the pumping well (MW-9) because of the scatter of the data points due to the turbulence caused by the pump.

Storage coefficient values range from 0.0061 to 0.010. These values generally indicate a confined aquifer condition.

During the pump test, the discharge started to decrease due to the increasing head in the storage tank and as a result of the pump overheating. In the calculations, one average discharge rate was used for the entire test.

Surface Water Features

Average rainfall for the Santa Fe Springs area is approximately 13 to 14 inches annually. Located 1/4 mile to the northeast is the Soreson Avenue storm drain. This concrete-lined channel is the only surface water feature within one mile of the facility. The San Gabriel River is slightly over

one mile west of the facility. The associated percolation basins are located 1-1/2 to 2 miles northwest of the site. These streams are classified as intermittent, due to the semi-arid climate of Southern California.

Ground Water Monitoring System

The facility ISD was issued on December 6, 1981, and required SCCC to install a ground water monitoring system in accordance with 40 CFR 265 Subpart F standards. A RCRA ground water monitoring system had not been installed by Spring of 1984. Board staff in a letter dated May 18, 1984, (see Appendix L) again directed SCCC to install RCRA ground water monitoring system and requested the company to submit a work plan by June 1, 1984.

SCCC submitted a ground water proposal in July 1984, which proposed to install six ground water monitoring wells consisting of three upgradient and three downgradient wells. This proposal after modification by the Regional Board and DOHS staffs, was approved by the agencies. The RCRA ground water monitoring system was installed in early 1985. RCRA detection monitoring was started by the company in March 1985. The initial sample results (see below) showed hazardous wastes constituents in the ground water, the original system was expanded. The current ground water monitoring system at the site consists of thirteen ground water monitoring wells (see Appendix D). Eleven of the wells were constructed with a 2-inch diameter casings. Two wells (wells 4A and 9) were constructed with 4-inch diameter PVC casings and with 0.020 inch machine-slotted well screens.

The second split sampling (Regional Board and the company's consultants) was conducted in March 1986 during this FY 1985-86 annual RCRA CME inspection.

Ground Water Monitoring Data

In April 1985, the results of the initial ground water sampling of March indicated that hazardous waste constituents had entered the ground water (uppermost aquifer) below the facility (see Appendix J). The split sampling conducted by the Regional Board staff and company's consultants revealed high levels of cadmium, chromium, nitrates, toluene, xylene, ethylbenzene and other organic compounds in MW-4 downgradient and adjacent to the pond. Some of the levels exceeded primary drinking water limits.

DOHS and EPA were notified of the monitoring results and at the direction of the Regional Board and DOHS, SCCC initiated the assessment of the site pursuant to RCRA regulations. SCCC notified the agencies about their ground water contamination pursuant to 40CFR 265.93(d)(1) regulations. Assessment of the RCRA regulated pond was started in the middle of 1985 by expanding the ground water monitoring system and initiating detailed hydrogeological investigations.

SCCC and Regional Board resampled the ground water monitoring wells in July 1985, and confirmed the analytical results of March 1985. The sampling results are included in Appendix J. Monitoring well (MW-4) still

contained high levels of organic contaminant, 500 mg/l of chromium, 0.78 mg/l of cadmium and 81 mg/l of nitrates (NO₃).

Regional Board and the company's consultant conducted the second phase (phase II) of the ground water split sampling in March of 1986, during this RCRA CME inspection. The results of this sampling are also included in Appendix K. The analytical results of the Regional Board's sampling again confirmed contamination of organics and chromium in well MW-4 and in addition, high levels of organics were also detected in MW-3 for the first time. It is possible MW-3 contamination are not a result of SCCC's operations. Regional Board will investigate.

RCRA Regulated Pond 1 - Closure Status:

SCCC submitted a closure plan for the pond to EPA, DOHS and Regional Board in July 30, 1985. The closure plan proposed the removal of standing liquid and sludges for proper disposal and the use of the pond area as a containment for the two above-ground tanks. The closure plan was implemented by the company without the written approval of the agencies. In a letter dated March 13, 1986, Regional Board staff made its review comments and recommendations to DOHS (see Appendix L). SCCC believed that the RCRA regulated pond was not the contributor to the ground water contamination so it should be exempted from post-closure monitoring requirements. SCCC also lacked the certification requirements of 40CFR Subpart G, subsection 265.115. Regional Board staff recommended that SCCC must submit the closure certification in order to justify proper closure. The closure plan gave information about the removal of standing liquid, sludges and residues from the pond. No information was provided about the removal or mitigation of the contaminated soil beneath the pond to comply with the closure performance standards pursuant to 40CFR 265 subpart G, subsection 265.111. Regional Board staff asked SCCC to submit a revised closure plan. To date, DOHS has neither taken any action nor sent SCCC a Notice of Deficiency (NOD) on their closure plan submittal, therefore SCCC's pond closure with respect to the RCRA closure standards is still questionable.

Facility RCRA Assessment/Verification and Correction Status

In April 1985, the results of the initial detection monitoring ground water sampling indicated that hazardous waste constituents had entered the ground water. SCCC's engineering consultant, Kleinfelder and Associates, contacted Regional Board staff and confirmed the contamination by comparing their data with the Regional Board's test results. Of particular concern were the high levels of heavy metals (chromium and cadmium), volatile organics, and coliforms. Monitoring well, MW-4 adjacent to the RCRA pond recorded the highest levels of contamination. The facility also showed high levels of coliform in monitoring well MW-6. The DOHS and EPA were notified of ground water contamination in a letter by SCCC dated May 10, 1985, (see Appendix L) pursuant to 40CFR 265.93(d) regulations. The company was directed to prepare an assessment plan by DOHS and Regional Board.

The site assessment activities were initiated by the company in July 1985, split ground water sampling were conducted by company's consultant and

Regional Board staff on July 24, 1985. A work plan for site assessment was dated in June 13, 1985. The work plan suggested an additional six monitoring wells, extensive soil boring in order to identify probable source(s) of the contamination and to evaluate horizontal and vertical extent/concentration of the contaminant plume. SCCC proposed to evaluate hydraulic characteristics of shallow aquifer underlying the site, and a remedial action plan (extraction and clean up of contaminated aquifer). The plan suggested a 24-week time schedule from the beginning of assessment (e.g., the source identification) to the final assessment report submittal. With some modifications, the assessment and mitigation plan was approved by the agencies.

SCCC's consultant submitted their final report entitled "Hydrogeologic Assessment of Pond Number 1,.." on October 24, 1985. The report summarized the work and findings of the hydrogeologic assessment of the site, extensive site investigation, and soil and water sampling which were conducted during the hydrogeologic assessment. The report made the following conclusions and recommendations:

1. A confined aquifer exists beneath the site with a potentiometric surface between approximately 42 to 45 feet below the ground level.
2. The general direction of the ground water flow is to the south - southwest.
3. Relatively low permeability soils were encountered from the surface to approximately 10 feet below ground surface. A second low permeability zone was encountered at approximately 25 to 50 feet below ground surface.

The hydrogeologic assessment of the pond also concluded that there was no evidence of pond leakage. The elevated levels of chromium and other contaminants detected in the soil and ground water were due to leakage from an old tank area. The company's consultant also believed that organic contamination was/is coming from off-site, however, failed to provide evidence of any off-site contamination. The assessment report also concluded that the waste from the old tank area migrated vertically through the vadose zone to the base of the 30-foot sand and then laterally under the pond. The assessment report recommended that a ground water extraction system be immediately implemented to remove high levels of chromium and organics in the vicinity of MW-4. Soil and water data related to hydrogeologic assessment of Pond 1 is given in Appendices I, J and K.

On March 5, 1986, SCCC's consultant submitted their phase II and assessment report which included additional hydrogeological investigations conducted by the consultant. Field investigations included soil boring/sampling of 19 soil test borings, additional monitoring wells construction/development, ground water sampling, and aquifer tests performed on August 29, 1985. Soil

and water data related to phase II of the assessment/verification investigations is included in Appendix K. The phase II assessment/verification investigations also stated the same conclusions as the phase I assessment report: that is that the waste (chromium) from the old tank area migrated vertically through the vadoze zone and then laterally under the pond. The report, however, failed to give the exact location of the abandoned old tank. It is also believed by the company's consultants that elevated levels of organic contaminant detected in the monitoring wells MW-3 and MW-4 were from the off-site source, however, they failed to pin point the exact source. The assessment report submitted on March 5, 1986, also recommended that corrective action regarding mitigation and clean up of the contaminated soil and ground water should be started immediately and prior to the regulatory approval. A corrective action plan or mitigation plan was submitted including information regarding the design of an optimum ground water extraction/treatment system, soil mitigation options and an on-going ground water monitoring and sampling program. Appendix H contains logs of well borings and well construction drawings.

Regional Board staff made its review comments and recommendations to DOHS on March 13, 1986 and May 16, 1986. These comments are included in Appendix L. Based on the historic use of the pond, past poor house-keeping practices including accidental spills, absence of records regarding location of the old underground tank, poor structural condition of the pond concrete base (many cracks were observed during the CME inspection through which the wastewater may have leaked into the ground water), Regional Board staff's position is that the pond, among the other suspected sources of ground water contamination, should also be considered a contributor to the ground water contamination. There is therefore no justification to absolutely rule out the possibility of pond 1 as a contributor to the contamination of ground water, particularly in ground water monitoring well MW-4 downgradient from the pond. Regional Board staff further feels that it is difficult to quantify or measure the significance of pond 1's contribution to soil and ground water pollution and should be addressed under a comprehensive remedial investigation of the entire site for optimum cleanup, as necessary.

On June 6, 1986, SCCC representatives met with DOHS and Regional Board staff to discuss the findings of on-site hydrogeological investigations. In that meeting SCCC's consultant stated that the organic contamination was suspected to be from off-site facilities (Pilot Chemicals - located north of the SCCC facility - see Appendix L). Regional Board and DOHS asked SCCC to further support their conclusion by evaluating chemical and waste storage data for adjacent facilities. SCCC's consultant agreed to provide justification of their initial findings that organics showing up in monitoring wells MW-3 and MW-11 are probably originating from adjacent property. Regional Board staff will review, comment and make recommendations, if necessary, on receipt of the data from SCCC's technical consultant.

Evaluation

During the current on-going environmental assessment of the site; extensive information on site-specifics, hydrogeology, and soil and ground water quality has been developed and submitted in the form of assessment

reports by the company's consultant. Field investigations conducted during development of the RCRA ground water monitoring system in accordance with the RCRA regulations, and subsequent detection monitoring, were utilized to develop the scope of the environmental assessment/verification phase. Contamination was detected in the ground water beneath the facility effected by the RCRA regulated waste management unit (Pond 1). Review of the assessment reports submitted by the company has also revealed that the pond was one of the sources of contamination among the other suspected sources. Regional Board staff believes that additional information, and data including investigation of any off-site contamination source(s) must be provided in addition to complete site assessment to determine the full extent of the contamination. After completing the site assessment, corrective action must be initiated without any further delay in order to ensure adequate protection of water quality beneath the site and to prevent further spreading of the contaminated plume.

APPENDIX A

REVIEW OF HYDROGEOLOGIC REPORT AND WRITTEN GROUND WATER MONITORING PROGRAM
(CME CHECKLIST)

REVIEW OF HYDROGEOLOGIC REPORT AND WRITTEN GROUND WATER MONITORING PROGRAM

Company Name Southern California
Chemical Company

EPA ID No. CAD008488025

Company Address _____

8851 Dice Road, Santa Fe Springs

Inspector's Name Athar Khan

Date March 18, 19, 20, and 25, 1986

Inspector's Civil Service Classification _____

Type of Facility	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
(a) Surface Impoundment	<u>X</u>	—	—
(b) Landfill	—	<u>X</u>	—
(c) Land Treatment Facility	—	<u>X</u>	—
(d) Disposal waste pile	—	<u>X</u>	—
1. Has the owner/operator (O/O) conducted a hydrogeologic assessment of this site?	<u>X</u>	On going (see comments)	
2. Has O/O identified the uppermost aquifer?	<u>X</u>	(see comments)	
3. Are there other aquifers that may be hydraulically interconnected?	—	—	<u>X</u> (see comments)
4. Are these other aquifers identified?	<u>X</u>	—	(see comments)
5. Does O/O have enough information to provide a reasonable understanding of the site's subsurface and to support the placement of wells capable of determining the facility's impact on the uppermost aquifer?	<u>X</u>	—	(see comments)
6. Did the O/O use appropriate techniques to collect and interpret the information used to support well placement?	<u>X</u>	—	(see comments)
7. Is the site being monitored at this time?	<u>X</u>	—	(see comments)
8. Is the site being monitored under detection, assessment, or corrective monitoring?			<u>Under assessment monitoring</u> (see comments)

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
9. Was the report written by a qualified geologist?	<u>X</u>	—	—(see comments)
10. Was the report accompanied by adequate support data, including:			
Drill Logs	<u>X</u>	—	—(see comments)
Geologic Maps	<u>X</u>	—	— " "
Topographic Map(s)	<u>X</u>	—	— " "
Cross Sections	<u>X</u>	—	— " "
Referenced Literature	<u>X</u>	—	— " "
Other (list <u>soil and ground</u> <u>water data</u>)	<u>X</u>	—	— " "
11. Was the boring program adequate to meet your evaluation needs?	<u>X</u>	—	—(see comments)
12. Was the number of cross sections adequate?	<u>X</u>	—	—
13. Were the cross sections adequately detailed?	<u>X</u>	—	—(see comments)
14. Were the details on the cross sections corroborated by adequate support data?	<u>X</u>	—	—(see comments)
15. Have ground water flow directions been determined?	<u>X</u>	—	—(see comments)
16. Was flow direction determined on basis of piezometric data?	—	<u>X</u>	—
17. Was there evidence of a vertical gradient?	—	<u>X</u>	—
18. Was there mixing of data from wells and piezometers?	—	<u>X</u>	—
19. Were O/O conclusions about flow direction demonstrated with support?	<u>X</u>	—	—
20. If piezometers were used, what was screen length?	<u>Piezometers were not used</u>		
21. How many piezometers were used?	<u>N/A</u>		
22. What was depth of piezometers?	<u>N/A</u>		
23. Did the O/O determine the hydraulic conductivity?	<u>X</u>	—	—

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
24. What was method used to determine hydraulic conductivity?			<u>Pump tests/step drawdown method</u>
25. Are there as built's of all monitor wells and piezometers?	<u>X</u>	<u>—</u>	(see comments)
26. Did the O/O construct a flow net of the ground water movement on his site?	<u>—</u>	<u>X</u>	<u>—</u>
27. Are there variations in flow direction due to:			
Intermittent pumping of nearby wells?	<u>—</u>	<u>—</u>	<u>X</u> (see comments)
Seasonal variations?	<u>—</u>	<u>—</u>	<u>X</u> (see comments)
28. How many upgradient wells have been constructed?			<u>Six upgradient wells (see comments)</u>
29. Is this an adequate number based on data in the hydrogeologic report?	<u>X</u>	<u>—</u>	(see comments)
30. How many downgradient wells have been constructed?			<u>Six downgradient wells (see comment)</u>
31. Is this an adequate number of downgradient wells on the basis of the hydrogeologic report?	<u>X</u>	<u>—</u>	(see comments)
32. Are there wells at the compliance point?	<u>—</u>	<u>—</u>	<u>X</u> (see comment)
33. Are the downgradient wells located properly to intercept leakage?	<u>X</u>	<u>—</u>	(see comment)
34. Are the wells screened in the uppermost aquifer?	<u>X</u>	<u>—</u>	<u>—</u>
35. What is the screen length of wells?	<u>—</u>	<u>—</u>	(see comments)
36. What was the method used to drill the wells?			<u>continuous flight hollow stem auger method</u>
37. What was the method used to develop the wells?			<u>airlift with a foot valve at the bottom (see comments)</u>
38. Are the wells sealed?	<u>X</u>	<u>—</u>	<u>—</u>
39. What is the sealant material?			<u>cement and bentonite seals</u>
40. What is the casing material?			<u>NSF-rated pw PVC</u>

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
41. What is the screen material?	NSF-rated pw PVC pipe with 0.020 inch machine slotted screen		
42. Is there evidence of the methods used to select filter pack and screen slot size?	—	—	<u>X</u>
43. Is the sand pack appropriate for the aquifer in which it is placed?	—	—	<u>X</u>
44. Is the screen slot size appropriate for the sand pack used?	—	—	<u>X</u>
45. Is there a written sampling and analysis plan?	<u>X</u>	—	(see comments)
46. Does the sampling and analysis plan provide for:			
Written procedures for purging wells?	<u>X</u>	—	—
Providing clean equipment for sampling each well?	<u>X</u>	—	—
Avoidance of contamination of equipment transported to each location?	<u>X</u>	—	—
Measuring water levels?	<u>X</u>	—	—
Recording water levels?	<u>X</u>	—	—
Recording depth of well?	<u>X</u>	—	—
Recording any problems encountered at each well?	<u>X</u>	—	—
Measuring certain parameters in the field?	<u>X</u>	—	—
Collecting samples of ground water without degassing of volatile organics?	<u>X</u>	—	—
Use of appropriate equipment?	<u>X</u>	—	—
Use of blanks, spikes, etc.?	<u>X</u>	—	—
Details of sample preservation?	<u>X</u>	—	—
Methods of analyses to be used?	<u>X</u>	—	—

- | | <u>Yes</u> | <u>No</u> | <u>Unknown</u> |
|---|---|-----------|-------------------------|
| 47. Have comparisons of ground water contamination indicator parameters for upgradient well(s) shown a significant increase (or pH decrease) over initial background? | — | <u>X</u> | — |
| 48. Have comparisons of indicator parameters for downgradient wells shown a significant increase (or pH decrease) over initial background? | <u>X</u> | — | (see comments) |
| <i>If yes, has the data been submitted to assessment program?</i> | | | |
| 49. If yes to above, were additional ground water samples taken from those downgradient wells where the significant difference was determined? | <u>X</u> | — | (see comments) |
| <i>Has this program been approved?</i> | | | |
| 50. If yes to above, what was source of significant increase over initial background? | 1) RCRA Pond 1
2) Abandoned underground tanks
3) off-site migration (see comments) | | |
| 51. Has O/O compared monitoring data collected downgradient to that from upgradient for a period of at least one year? | <u>X</u> | — | — |
| 52. Was it determined that hazardous waste or hazardous waste constituents from the facility have entered the ground water? | <u>X</u> | — | (see comments) |
| 53. If yes to above, has there been a determination of the rate of migration of hazardous waste or hazardous waste constituents from the facility? | — | — | <u>X</u> (see comments) |
| 54. If yes to 44, list the constituents originating from the waste management area. | <u>Chromium, copper, cadmium, nitrates, chlorides, TOC and volatile organics (suspected) from offsite</u> | | |
| 55. List the wells which have shown significant increases. | <u>MW-4 (high levels of chromium, cadmium, cadmium and nitrates)</u> | | |
| <u>MW-3 (organics)</u>
<u>MW-4A (specific conductance)</u>
<u>MW-7 (TOC)</u>
<u>MW-9 (TOC)</u>
<u>MW-11 (copper)</u> | | | |

Unkown

- X

- (see comments)

- X

- N/A

- X =

- X

- X

- X**

Comments

Signature of Reviewer

COMMENTS ON APPENDIX A - CME CHECKLIST

1. The SCCC is at present in the RCRA assessment/verification mode. Extensive site assessment and characterization has been conducted and is still underway in order to determine the extent of the soil and ground water contamination including any suspected source(s) of off-site contamination. The field investigation and hydrogeological assessment data obtained to date has been submitted for the agency review.
2. Sufficient information on the uppermost aquifer beneath the facility has been provided in the assessment reports. For detailed information on site geology and hydrogeology refer to Section entitled, "Site Geology and Hydrogeology" of this report.
- 3 and 4. The Gage aquifer underlies the site and is approximately 15 to 20 feet thick, and consists of fine to medium sand in this area. Onsite soil boring indicated that the bottom of Gage is actually at approximately 30 to 35 feet; and this aquifer is dry beneath the facility. Under the Gage aquifer, lies the Jefferson aquifer which is the uppermost water bearing aquifer beneath the site. Since all the borings drilled on-site encountered a clay to silty clay layer believed to be from 25 feet to 100 feet thick and of low permeability, it is unlikely that any hydraulic interconnection between the aquifers beneath the site could exist. Regional cross-section of the aquifer is included in Appendix E.
- 5 thru 8. As part of ground water monitoring and presently undergoing assessment of the site, thirteen ground water monitoring wells (six upgradient and six downgradient, one being non-productive) have been installed on-site under an approved workplan by DOHS and Regional Board. The monitoring wells are installed (number, location and design) are in compliance with applicable RCRA/EPA standards and are believed to be capable of determining the facility's impact on the uppermost aquifer. Assessment/Verification monitoring of the site also includes quarterly ground water sampling of facility's wells (split sampling with Regional Board is performed semi-annually). The next split sampling (for first quarter of FY 1986-87) is scheduled for July 7, and July 8, 1986.
9. The hydrogeological assessment including field investigations of the site is conducted by SCCC's technical consultant, Kleinfelder and Associates under the supervision of Randy Harris, Senior Hydrogeologist, California R.G # 3708.
- 10 thru 14. The report entitled, 'Environmental Assessment', dated March 15, 1986, includes extensive information and data on soil borings, aquifer tests, monitoring well drilling, analytical results of soil and ground water sampling taken during the hydrogeologic assessment. It also contains geologic cross-sections, fence diagram, logs of well borings and related supporting data (see Appendix H).

15. The direction of the uppermost aquifer was established during hydrogeological investigations, during installation of the ground water monitoring wells (test holes were installed in order to establish ground water gradient) and by measuring the water levels in the test holes and monitoring wells. Ground water contours of the aquifer were developed by periodic measurement of water levels (seasonal fluctuations) and these contours are shown in Appendix F.
25. As-builts, logs of borings and drawings showing 2-inch and 4-inch well configurations are included in Appendix H.
27. Appendix H contains the ground water contour maps which indicates ground water flow direction, and the data generated to indicate the fluctuations in ground water levels due to seasonal variations. Five production wells are located within a one-mile radius of the SCCC site. No further data regarding the status (active or inactive) of these wells is available.
- 28 thru 33. Detection monitoring was initiated by installing three upgradient and three downgradient wells with respect to the pond area. The number and location of these wells was established based on site specifics and available hydrogeological data at that time. During the assessment/verification monitoring of the site, six additional wells were installed, upgradient and downgradient of the waste management unit (3 up, 3 down) in order to determine the nature and extent of the contamination. Wells MW-4 and MW-4A, 5 and 7 are located hydraulically down gradient to the waste management area and are considered to be properly placed in order to intercept any leakage from the waste management unit.
35. The screen length of each well is illustrated in the assessment report submitted by the company on March 15, 1986, and is as follows:

MW-1	- 15 feet
MW-2	- 29 feet
MW-3	- 32 feet
MW-4	- 30 feet
MW-4A	- 20 feet
MW-5	- 29 feet
MW-6A	- 21 feet
MW-6B	- 30 feet
MW-7	- 31 feet
MW-8	- 35 feet
MW-9	- 33 feet
MW-10	- 31 feet
MW-11	- 20 feet
45. SCCC submitted a written ground water monitoring proposal pursuant to 40CFR 265 subpart F standards to the Regional Board on July 2, 1984.
48. Specific conductance in well MW-4A showed a significant increase over initial background. TOCs were detected up to 440 mg/l in MW-10, 260 mg/l in MW-7 and up to 210 mg/l in MW-9.

49. Additional sampling was conducted in July 85, and March 86, and the results of the additional sampling were verified with the previous sampling results. Higher levels of organic compounds were also detected in MW-3 during the phase II sampling.
50. It is suspected that the waste management unit (Pond 1) was the principal significant source of ground water contamination, however, it is also suspected that other sources on-site and or off-site might exist and investigations in order to verify other sources are presently being conducted by the company's consultant.
- 52 and 53. Based on the data available, that is the company's past disposal history, poor house-keeping at the facility, and soil and ground water analysis data, the ground water beneath the facility have been impacted. However, the full extent of the contamination is yet to be determined.
57. Chromium, copper and cadmium the principal contaminants detected in the ground water (MW-4). Some of the important properties related to water quality are as follows:

Chromium - chromium has oxidation states ranging from Cr^{+2} to Cr^{+6} ; the trivalent form is found most commonly in nature. Chromium is found rarely in natural waters. When found it's only slightly soluble in water in most oxidation states. DOHS' primary drinking water standard is 0.05 mg/l.

Copper - concentrations of copper more than 1.0 mg/l is believed to be harmful for human consumption. Copper has a density of 0.322 lbs/in³ and specific gravity is 8.91. Some copper salts are quite soluble in water.

Cadmium - Cadmium is a non-essential mineral and recognized to be highly toxic for humans. It is less soluble in water but readily soluble in mineral acids. DOHS' drinking water standard for cadmium is 0.01 mg/l.

- 60 thru 63. Location of the ground water monitoring wells are shown in the facility map provided in Appendix D. The additional wells were placed based on the hydrogeological investigations and based on the initial soil/ground water quality data. Further evaluation of monitoring well system and adequacy of the assessment program is provided in the CME report. The ground water monitoring program is probably adequate.

APPENDIX B

FIELD REVIEW OF HAZARDOUS WASTE DISPOSAL SITE TO DETERMINE COMPLIANCE WITH
GROUND WATER MONITORING REQUIREMENTS (CME CHECKLIST)

FIELD REVIEW OF HAZARDOUS WASTE DISPOSAL SITE
TO DETERMINE COMPLIANCE WITH GROUND WATER MONITORING REQUIREMENTS

Company Name Southern California EPA ID No. CAD008488025
Chemical Company
Company Address 8851 Dice Road Company Contact Tere King
Santa Fe Springs Title Manager Environmental Affairs

Inspector's Name Athar Khan

Civil Service Classification Sanitary Engineerbg Associate

Date of Inspection March 18, 19, 20, and 25, 1986

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
<u>Type of Facility:</u>			
(a) Surface Impoundment	<u>X</u>	<u> </u>	<u> </u>
(b) Landfill	<u> </u>	<u>X</u>	<u> </u>
(c) Land Treatment Facility	<u> </u>	<u>X</u>	<u> </u>
(d) Disposal Waste Pile	<u> </u>	<u>X</u>	<u> </u>
1. Was the ground water monitoring program and geologic assessment reviewed prior to site visit?	<u>X</u>	<u> </u>	<u> </u>
2. Has the ground water monitoring plan been implemented?	<u>X</u>	<u> </u>	<u> </u>
3. Do the plans provided in the geologic report accurately reflect:			
Site topography?	<u>X</u>	<u> </u>	<u> </u>
Site geology?	<u>X</u>	<u> </u>	<u> </u>
Current status of facilities?	<u>X</u>	<u> </u>	<u> </u>
4. Is a regional map of the area, with the facility delineated, included in the report?	<u>X</u>	<u> </u>	<u> </u>
5. If yes, what is the scale?		<u>1" = 80'</u>	
6. Are there any streams, rivers, lakes, or wetlands near the facility?	<u>X</u>	<u> </u>	<u>(see comments)</u>

Yes No Unknown

7. If yes to above, list and give approximate distance and indicate apparent up- or downgradient direction. X
- 1) Sorenson Avenue storm drain -
Approximate distance 1/4 mile
northeast of the facility
- 2) San Gabriel River - Approximate distance
1 mile west of the facility.
8. Is there any evidence in these adjacent water bodies of contaminants coming from the facility? X
- What is the evidence? _____
-
9. Are there any discharging or recharge wells near the facility? X (see comments)
10. If yes to above, list and give approximate distance and indicate apparent up- or downgradient direction? _____ (see comments)
11. Is a site water contour map included in the geologic report? X (see comments)
12. Does the contour map appear logical on the basis of topography and observed data? X (see comments)
13. Are static water levels shown? X (see comments)
14. Is at least one monitoring well located in the area that appears to be hydraulically upgradient? X (see comments)
15. Are at least three monitoring wells located in an area that appears to be hydraulically downgradient? X (see comments)
16. Are there any seeps or wet areas downgradient of the facility? _____ X (see comments)
17. Are there downgradient areas that appear to be in need of additional monitoring wells? _____ X
- If yes, describe the locations. N/A

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
18. List the <u>number</u> of wells at the site.	<u>MW-1,2,3,4,4A,5,6,6A,7,8,9 10 and 11</u>		
19. Are there concrete surface seals?	<u>X</u>	(see comments)	
20. Are the wells capped?	<u>X</u>	(see comments)	
21. Do the caps lock?	<u> </u>	<u>X</u> (see comments)	
22. Are there protective standpipes in place around above-ground wells?	<u>X</u>	<u> </u>	<u> </u>
23. Is the plot plan used for the inspection the same as the one in the monitoring program plan documentation?	<u>X</u>	<u> </u>	<u> </u>
24. Are all components of the facility identified during the field review addressed in the monitoring program documentation?	<u>X</u>	<u> </u>	<u> </u>
25. Are monitor well locations and numbers observed at the site in agreement with locations and numbers shown in the hydrogeologic report which documents the monitoring program?	<u>X</u>	<u> </u>	<u> </u>
26. Were locations and elevations of the monitor wells surveyed into some known datum?	<u>X</u>	<u> </u>	<u> </u>
27. Did you sound the wells to determine total depth?	<u> </u>	<u>X</u>	<u> </u>
28. Were there discrepancies in total depth greater than two feet?	<u> </u>	<u>X</u>	<u> </u>
29. If yes to above, list the wells and the amount of the discrepancy?	<u>N/A</u>		
<hr/>			
30. Were water level elevations measured during the site visit?	<u>X</u>	<u> </u>	<u> </u>
31. Was ground water encountered in all monitoring wells?	<u> </u>	<u>X</u>	<u> </u>
32. List any wells which were dry.	<u>MW-6A</u>		

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
33. Are samples from any wells turbid (where turbidity means fine material from the aquifer, not chemical or biologic reactions in the well)?	—	<u>X</u>	—
34. List wells that produce the turbid samples?	<u>N/A</u>		
35. If yes to above, list well number and water level elevation.	<u>N/A</u>		
36. If no to above, explain.	—		
37. What material (Teflon, stainless steel 316 or 304, PVC, etc.) was used in the construction of the well casing? Blank PVC casing 0.02 inch well screen? <u>machine slotted</u> (see comments)	—		
38. Is there a copy of the sampling plan at the facility?	<u>X</u>	—	—
39. Is the plan being followed in regard to:			
Sampling schedule?	<u>X</u>	—	—
Sampling methods?	<u>X</u>	—	—
Sample preservation	<u>X</u>	—	—
Sample handling?	<u>X</u>	—	—
Sample analysis?	<u>X</u>	—	—
Record keeping?	<u>X</u>	—	—
40. Are organic constituents to be sampled?	<u>X</u>	—	—
41. Are samples collected with appropriate equipment and methods to minimize absorption and volatilization?	<u>X</u>	—	—
42. Are appropriate sample preservation and preparation procedures being followed (filtration and preservation, as appropriate)?	<u>X</u>	—	—
43. Are samples refrigerated?	<u>X</u>	—	—

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
44. Are EPA recommended sample holding period requirements being adhered to?	<u>X</u>	—	—
45. Are suitable container types being used?	<u>X</u>	—	—
46. Is a chain of custody control procedure clearly defined?	<u>X</u>	(see comments)	
47. Is sample analysis performed by a qualified laboratory?	<u>X</u>	(see comments)	
48. Name of laboratory performing analyses?	<u>Brown and Caldwell</u>		
	<u>Analytical Laboratory, Pasadena</u>		
49. Are analytical methods described in the records?	<u>X</u>	(see comments)	
50. Are the required ground water quality parameters being tested for?	<u>X</u>	(see comments)	
51. Are the required ground water contamination indicator parameters being tested for?	<u>X</u>	(see comments)	
52. Are any analytical parameters determined in the field?	<u>X</u>	(pH, Sp. conductance and temperature)	
53. Are field activity logs included?	<u>X</u>	—	—
54. Are field activity logs filled in as samples are being collected?	<u>X</u>	—	—
55. Are the names and position of the field personnel included in the field logs?	<u>XX</u>	—	—
56. Is an analysis program set up to determine the presence of contamination using EPA guidelines?	<u>X</u>	—	—
57. Brief summary of site conditions and comments on the ground water monitoring program at this site.	See evaluation section of the		

CME report

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
58. Is a more detailed technical evaluation required to determine the adequacy of the ground water monitoring program at this site?	<u>X</u>	_____	_____
Why?	<u>Detailed site characterization</u>		
<u>is needed under the assessment in order to determine full extent of the</u> contamination and to develop effective remedial measures. More investigation is needed in order to assess any possible off-site source(s) of ground water contamination.			

Atash Khan
Signature of Reviewer

oxidation states. DOHS' primary drinking water standard is 0.05 mg/l.

Copper - concentrations of copper more than 1.0 mg/l is believed to be harmful for human consumption. Copper has a density of 0.322 lbs/in³ and specific gravity is 8.91. Some copper salts are quite soluble in water.

Cadmium - Cadmium is a non-essential mineral and recognized to be highly toxic for humans. It is less soluble in water but readily soluble in mineral acids. DOHS' drinking water standard for cadmium is 0.01 mg/l.

60 thru 63. Location of the ground water monitoring wells are shown in the facility map provided in Appendix D. The additional wells were placed based on the hydrogeological investigations and based on the initial soil/ground water quality data. Further evaluation of monitoring well system and adequacy of the assessment program is provided in the CME report. The ground water monitoring program is probably adequate.

COMMENTS ON APPENDIX B - CHECKLIST

6 and 7. There is a storm control channel known as "Sores on Avenue Stormdrain" located about 1/4 mile northeast of the facility and it is concrete-lined. The San Gabriel River is slightly over one mile west of the facility.

9 and 10. Five production wells are located within 1-mile radius of the facility, however, it is not known how many of these wells are active, so the effects (discharging or recharging) of these wells on the ground water beneath the facility is unknown.

11 thru 13. Contour maps of the ground water beneath the facility are provided in Appendix F and appear to be justifiable on the basis of site specific conditions (hydrogeological conditions). Static water levels of the ground water monitoring wells are included in the water data provided in the assessment reports.

14 and 15. The existing upgradient and downgradient wells are believed to be located hydraulically upgradient and downgradient to the waste management area respectively and are justified by the hydrogeological data available for the site.

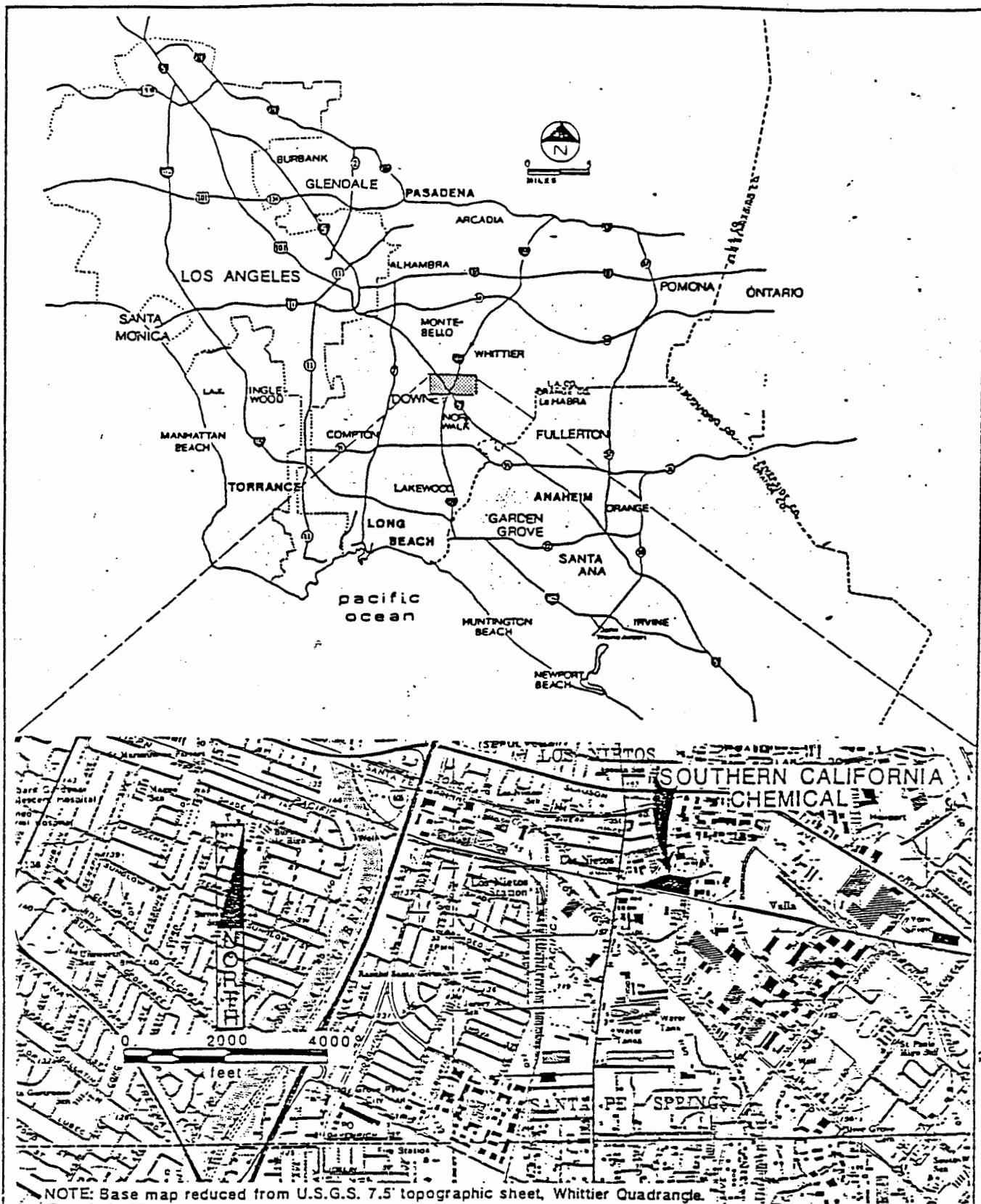
16. In the past the facility contained four copper-oxide ponds and one 150,000-gallon rainwater storage pond which showed downgradient seeps and wet areas. The copper oxide ponds are no longer in service, but a rainwater storage pond is still in service. Refer to the 'Pond/Location Map' in Appendix D.

19 thru 22. All the monitoring wells have concrete surface seals and are fitted with steel screw caps. Well details are provided in Appendix H. All the wells except MW-5 were not locked at the time of inspection and water sampling. Wells MW-5, 7, 6A and 6B have protected stand pipes to protect them from surface flooding.

46 thru 51. Chain-of custody control procedures are provided in Appendix K. The ground water samples were tested at the State of California, DOHS and EPA approved laboratory, Brown and Caldwell Laboratory Pasadena. Regional Board's water samples were analyzed in DOHS' Laboratory in Los Angeles. Ground water quality parameters and indicator parameters tested are included in Appendix J.

APPENDIX C

FACILITY LOCATION MAP

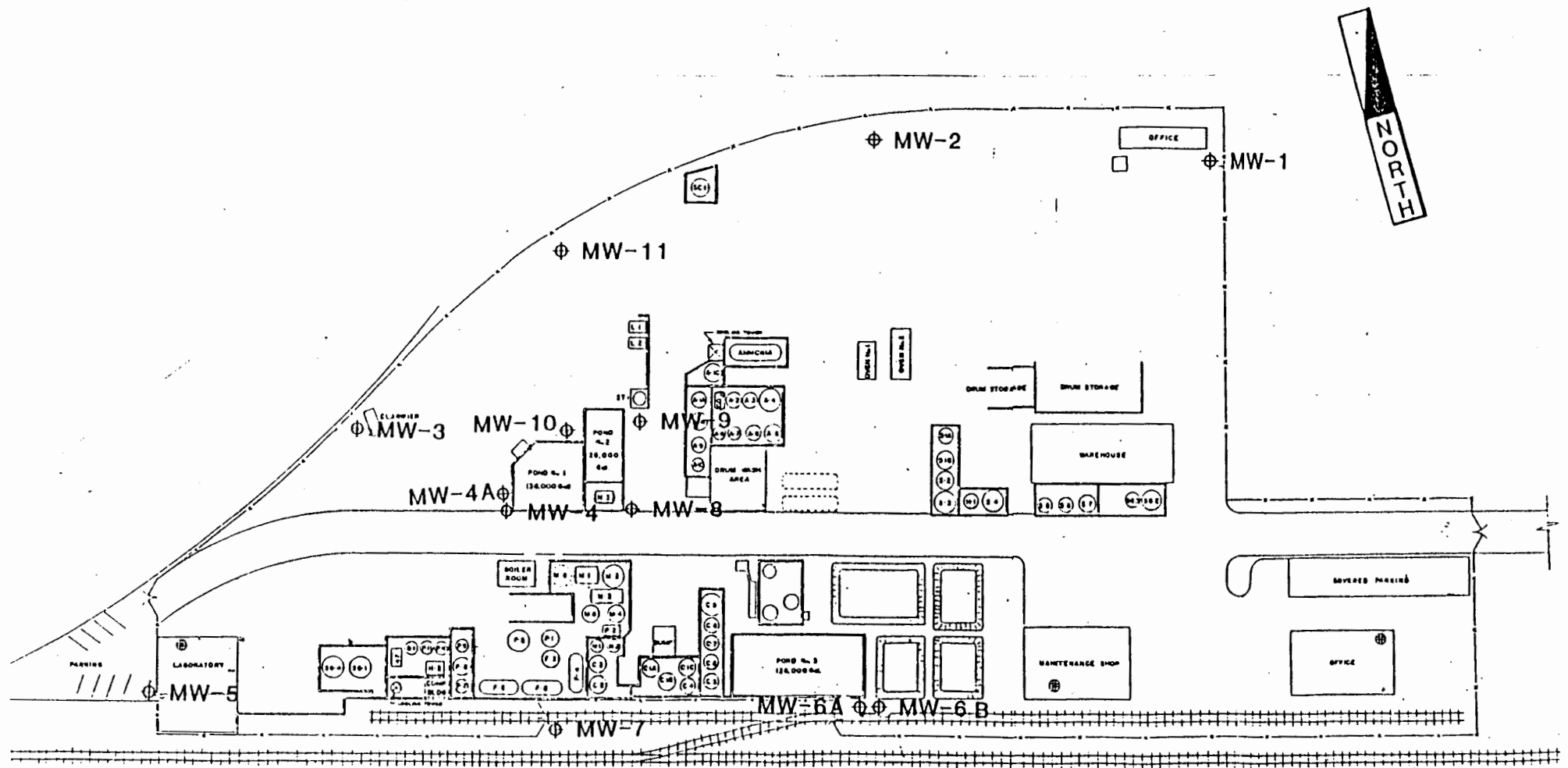


J.H. KLEINFELDER & ASSOCIATES GEOTECHNICAL CONSULTANTS • MATERIALS TESTING	SOUTHERN CALIFORNIA CHEMICAL Santa Fe Springs, California	PLATE 1
PREPARED BY: NAP DATE: 11/85 CHECKED BY: MWG DATE: 11/85	PROJECT NO.	

APPENDIX D

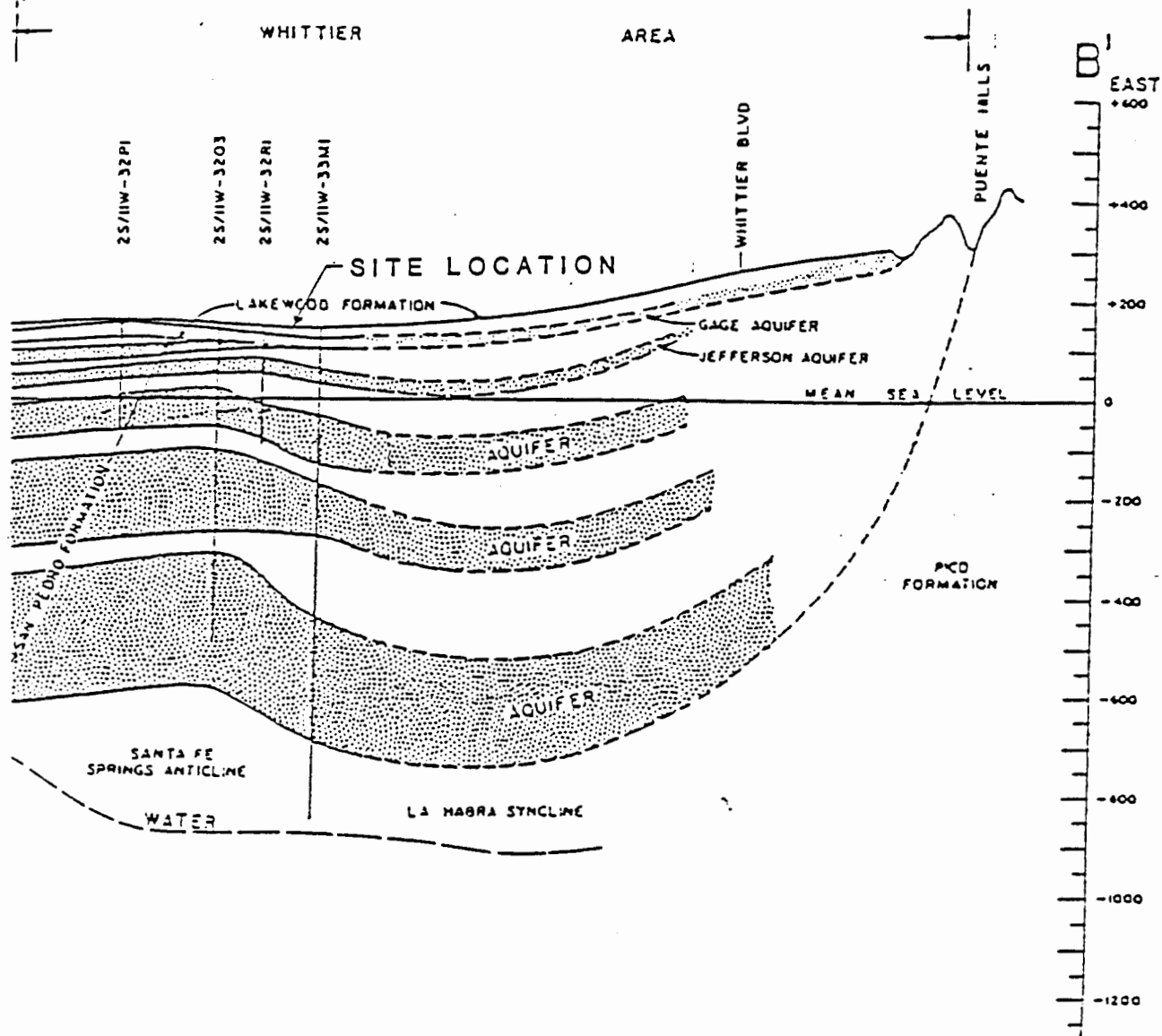
GROUND WATER MONITORING WELL AND POND 1 LOCATION MAP

110



APPENDIX E

REGIONAL CROSS SECTION AND SITE FENCE DIAGRAM (GEOLOGIC) - AQUIFER TEST
DATA FOR MW-4



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



SOUTHERN CALIFORNIA
CHEMICAL COMPANY

PLATE

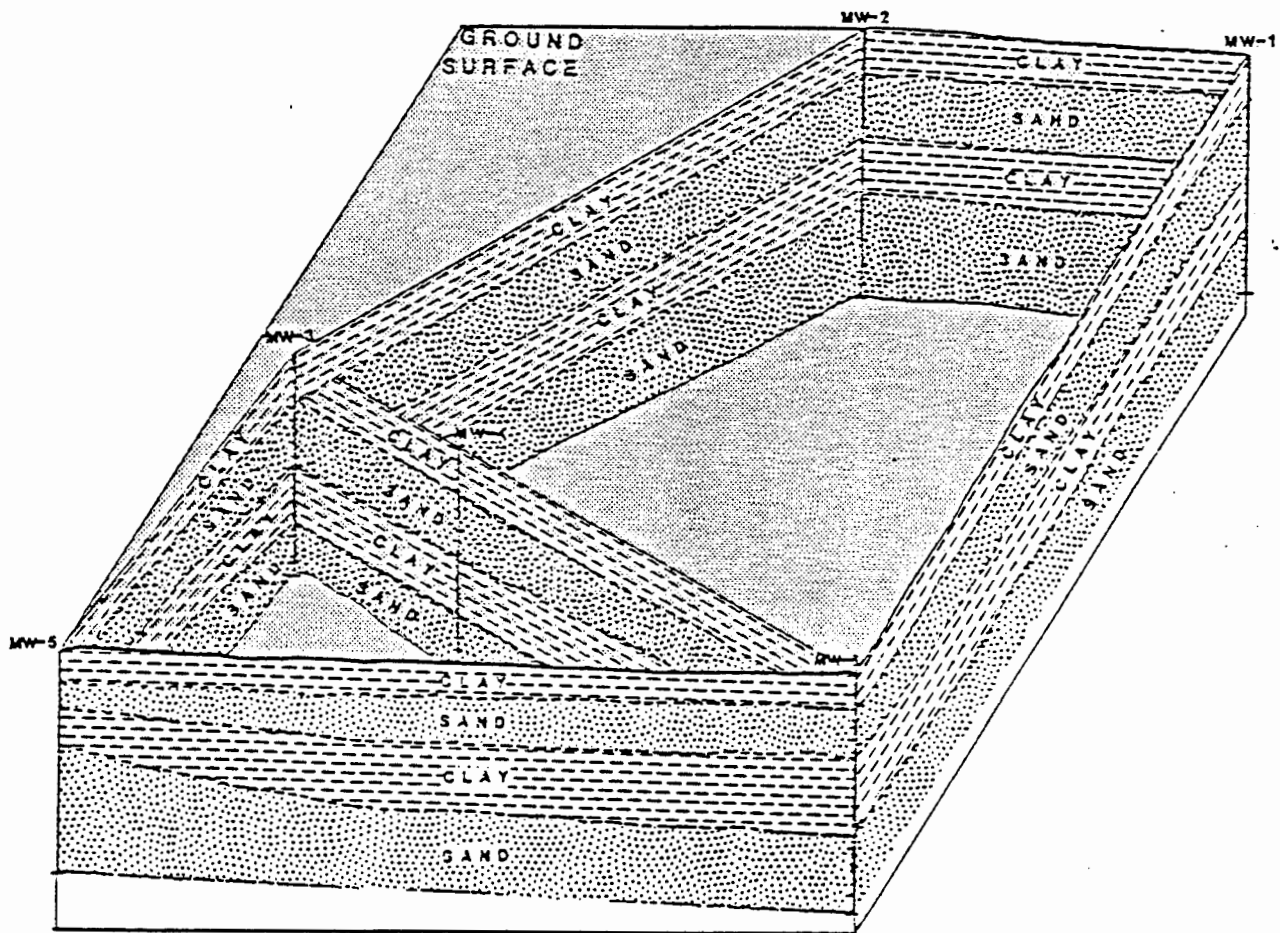
35

PREPARED BY: DATE:

REVIEWED BY: DATE:

REGIONAL CROSS SECTION

PROJECT NO.



J. H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



SOUTHERN CALIFORNIA
 CHEMICAL COMPANY

FENCE DIAGRAM

PLATE

24

PREPARED BY:

DATE:

CHECKED BY:

DATE:

PROJECT NO. Q1014-2

PROJECT NUMBER Q-1014-2 SOUNDER NUMBER _____
 TEST TYPE Pumping Test WELL NUMBER MW 4
 REFERENCE POINT T.O.C. (south side)

DATE	TIME		DEPTH TO WATER (FEET)	DRAW DOWN (RECOVERY) (FEET)	PUMPING RATE (GPM)		OBSERVATIONS
	ELAPSED (MIN.)	24 HOUR					
		9:00	43.78				
8-29-85.	0	09:41	43.78				
	1		43.81	.03			
	2		43.82	.04			
	3		43.84	.06			
	4		43.85	.07			
	5		43.83	.05			
	6		43.83	.05			
	7		43.83	.05			
	8		43.92	.04			
	9		43.82	.04			
	10		43.82	.04			
	12		43.82	.04			
	14		43.83	.05			
	16		43.83	.05			
	18		43.83	.05			
	20		43.83	.05			
	25		43.84	.06			
	30		43.84	.06			
	35		43.86	.08			
	40		43.88	.10			
	45		43.89	.11			
	50		43.90	.12			
	55		43.90	.12			
	60		43.91	.13			
	70		43.92	.14			
	80		43.94	.16			
	90		43.96	.18			



J. H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

PUMPING TEST RECORD

SHEET 1 OF 3

PROJECT NUMBER Q-1014-2 SOUNDER NUMBER 1
 TEST TYPE Pumping WELL NUMBER MW 4
 REFERENCE POINT T.O.C. Southside

DATE	TIME		DEPTH TO WATER (FEET)	DRAW DOWN (FEET)	RECOVERY (feet)		OBSERVATIONS
	ELAPSED (MIN.)	24 HOUR					
8-29-85	100		43.96	0.18			
	110		43.97	0.19			
	120		43.97	0.19			
	140		43.98	0.20			
	160		43.99	0.21			
	180		43.99	0.21			
	200		43.99	0.21			
	220		43.99	0.21			
	240		43.99	0.21			
	250		43.99	0.21	0.00		Shut down pump
	251		43.99	0.21	0.00		
	252		43.98	0.20	0.01		
	253		43.91				
	254		43.97	0.19	0.02		
	255		43.97	0.19	0.02		
	256		43.96	0.18	0.03		
	257		43.97	0.19	0.02		
	258		43.97	0.19	0.02		
	259		43.97	0.19	0.02		
	260		43.96	0.18	0.03		
	262		43.97	0.19	0.02		
	264		43.96	0.18	0.03		
	266		43.97	0.19	0.02		
	268		43.96	0.18	0.03		
	270		43.97	0.19	0.02		
	275		43.96	0.18	0.03		
	280		43.95	0.17	0.04		
	285		43.95	0.17	0.04		
	290		43.94	0.16	0.05		



J. H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

PUMPING TEST RECORD

SHEET 2 OF 3

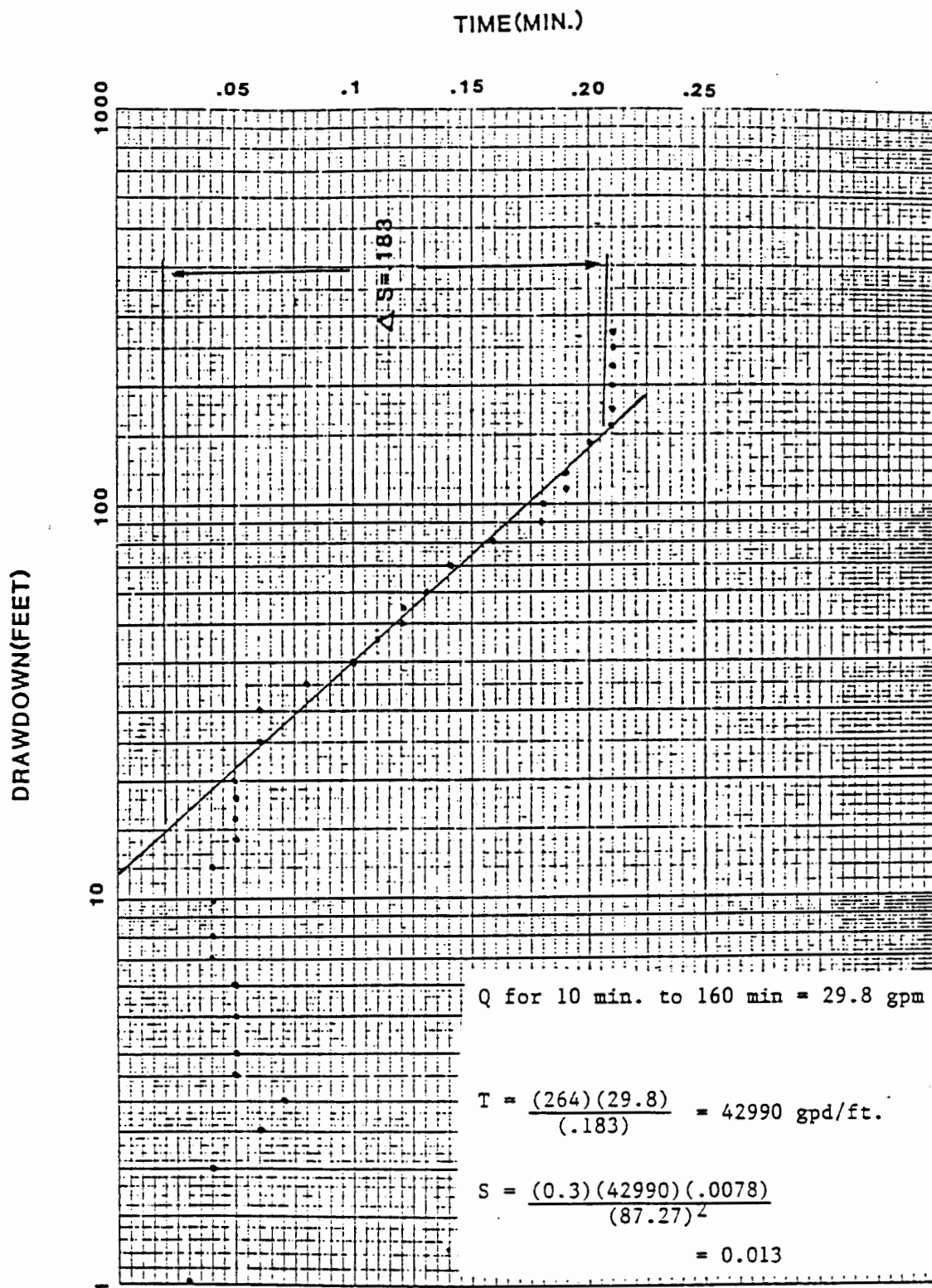
SOUNDER NUMBER

WELL NUMBER MW 4

REFERENCE POINT.



PUMPING TEST RECORD



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL & GROUNDWATER CONSULTANTS



Project Number Q1014-2

MARCH 1986

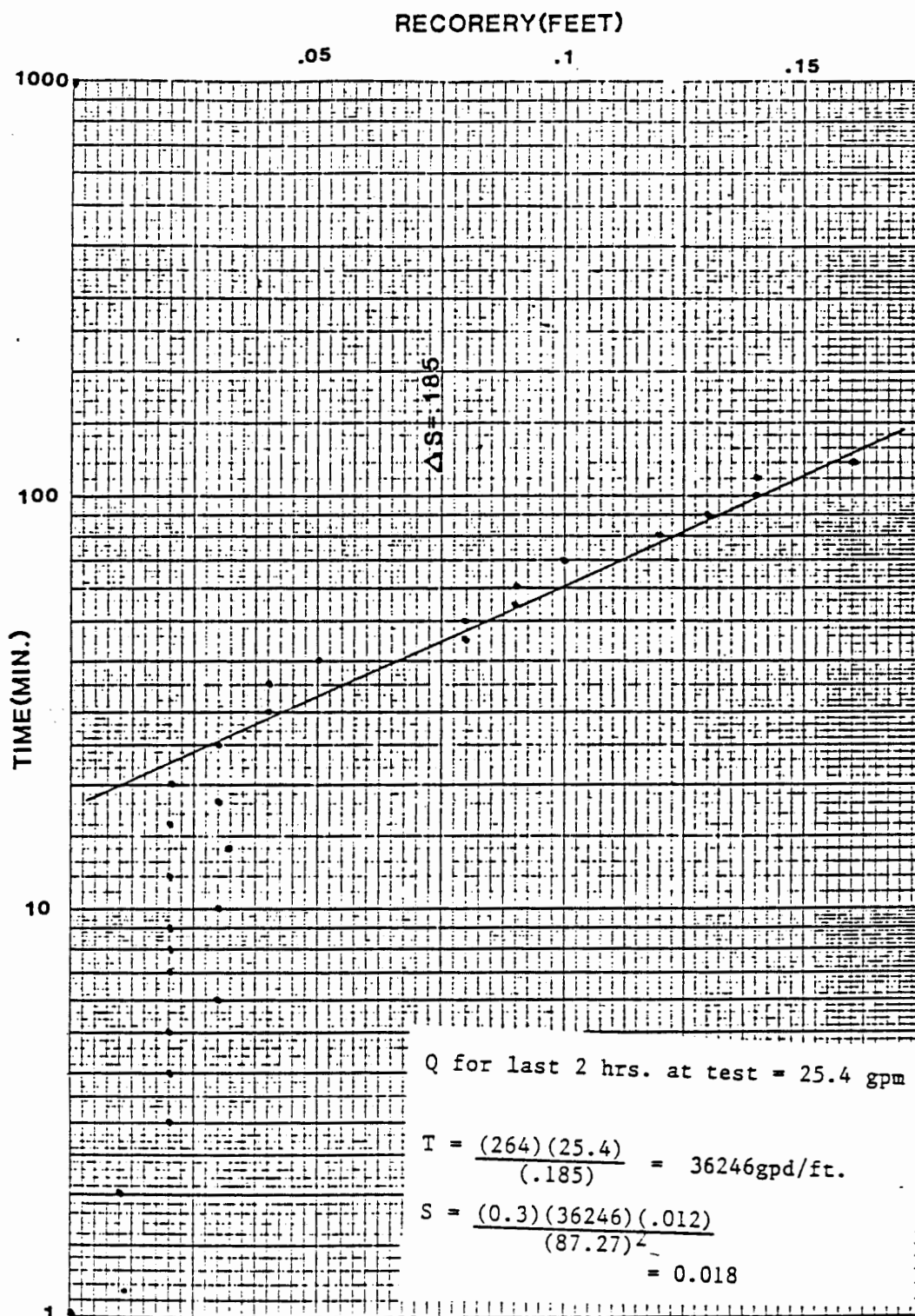
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

SANTA FE SPRINGS, CALIFORNIA

JACOB-COOPER APPROXIMATION

DRAWDOWN MW 4

PLATE



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL & GROUNDWATER CONSULTANTS



Project Number

SOUTHERN CALIFORNIA CHEMICAL CO., INC.
SANTA FE SPRINGS, CALIFORNIA
JACOB-COOPER APPROXIMATION
RECOVERY MW 4

PLATE

Table

Step Drawdown Test Results

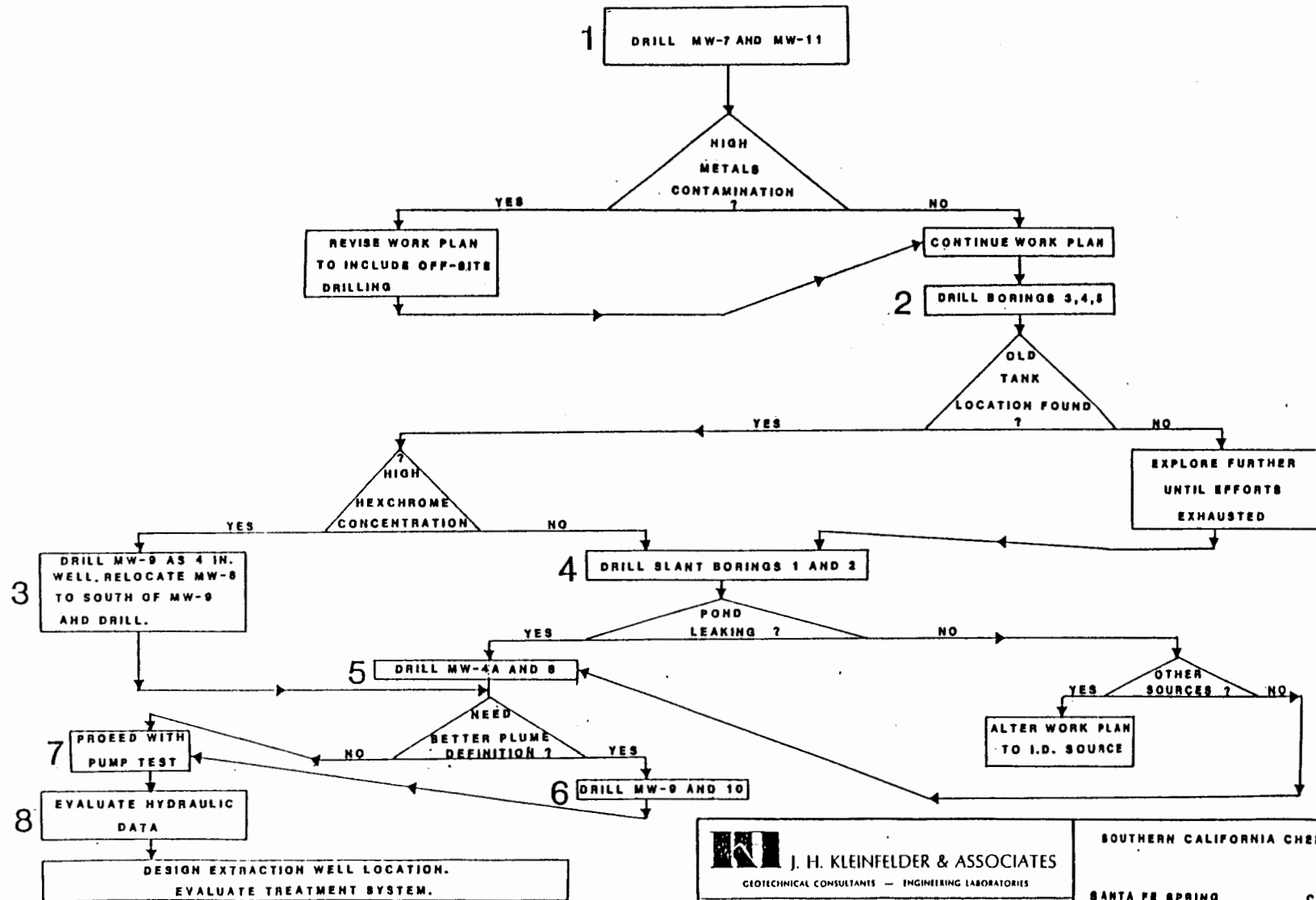
<u>Pumping Rate</u> (gpm)	<u>Time Interval</u> (minutes)	<u>Drawdown at end of</u> <u>Time Interval (feet)</u>	<u>Specific</u> <u>Capacity (gpm/ft)</u>
25.0	60	8.9	2.81
35.0	50	12.50	2.80

TABLE L

Results of Aquifer Test

<u>Well No.</u>	<u>Analysis</u> <u>Method</u>	<u>Test Type</u>	<u>Transmissivity</u> (gpd/ft)	<u>Storage</u> <u>Coefficient</u>
4	Jacob-Cooper Approximation	Drawdown	42,990	0.013
4	Jacob-Cooper Approximation	Recovery	36,246	0.018
8	Jacob-Cooper Approximation	Drawdown	41,250	0.0061
8	Theis Curve Matching	Drawdown	44,694	0.0062
8	Jacob-Cooper Approximately	Recovery	42,984	0.0064
10	Jacob-Cooper Approximation	Drawdown	32,057	0.010
10	Jacob-Cooper Approximation	Recovery	42,710	0.0070
10	Theis Curve Matching	Recovery	34,930	0.010

FIELD INVESTIGATION FLOW CHART



J. H. KLEINFELDER & ASSOCIATES

GEOTECHNICAL CONSULTANTS — ENGINEERING LABORATORIES

DRAWN BY: JF

DATE: 6-88

CHECKED BY: RCH

DATE: 6-88

SOUTHERN CALIFORNIA CHEMICAL

SANTA FE SPRING

CALIFORNIA

PROJECT NO. Q-1014-2

PLATE NO. 5

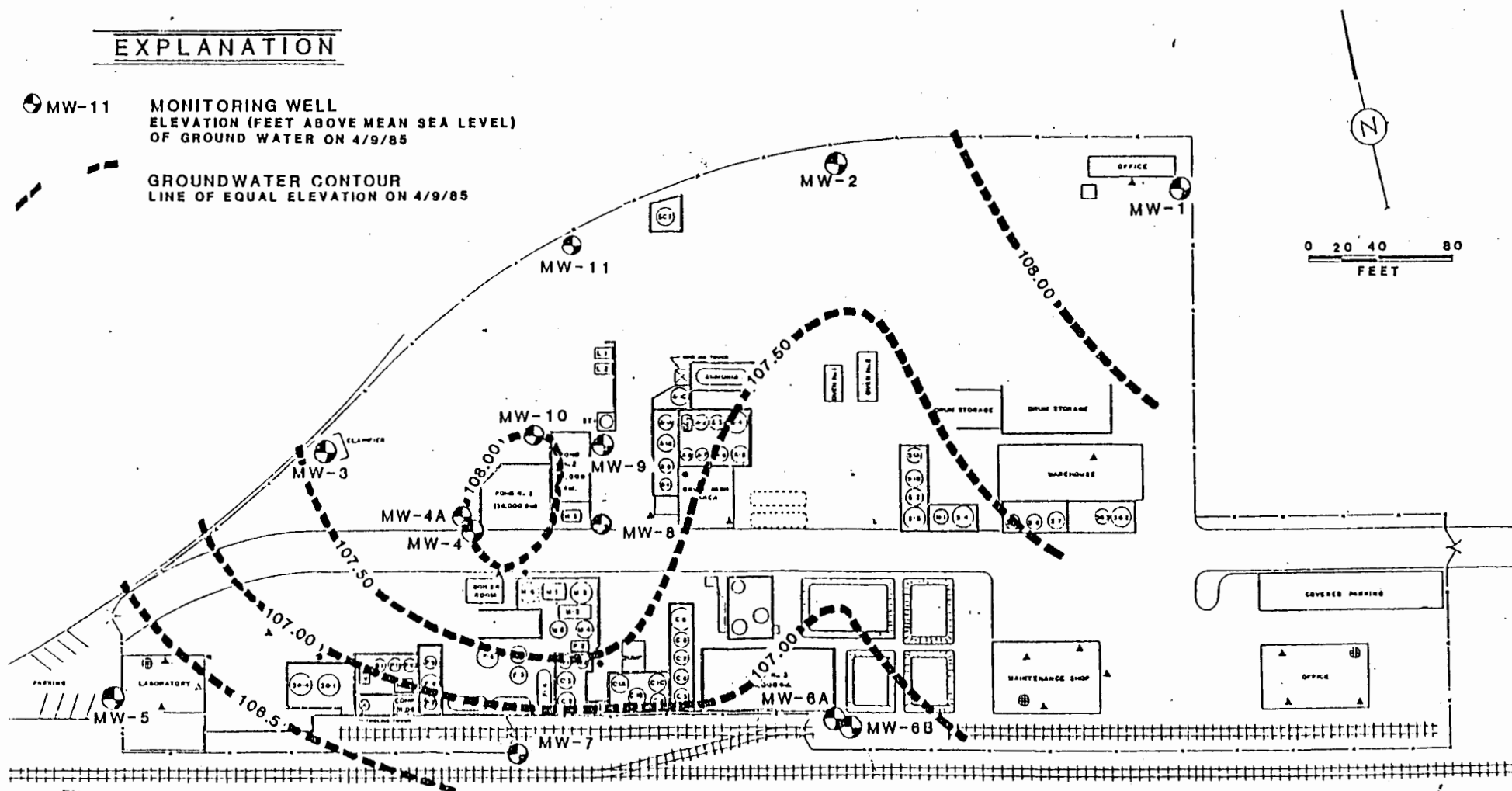
APPENDIX F

GROUND WATER ELEVATION CONTOUR MAPS

EXPLANATION

MW-11 MONITORING WELL
ELEVATION (FEET ABOVE MEAN SEA LEVEL)
OF GROUND WATER ON 4/9/85

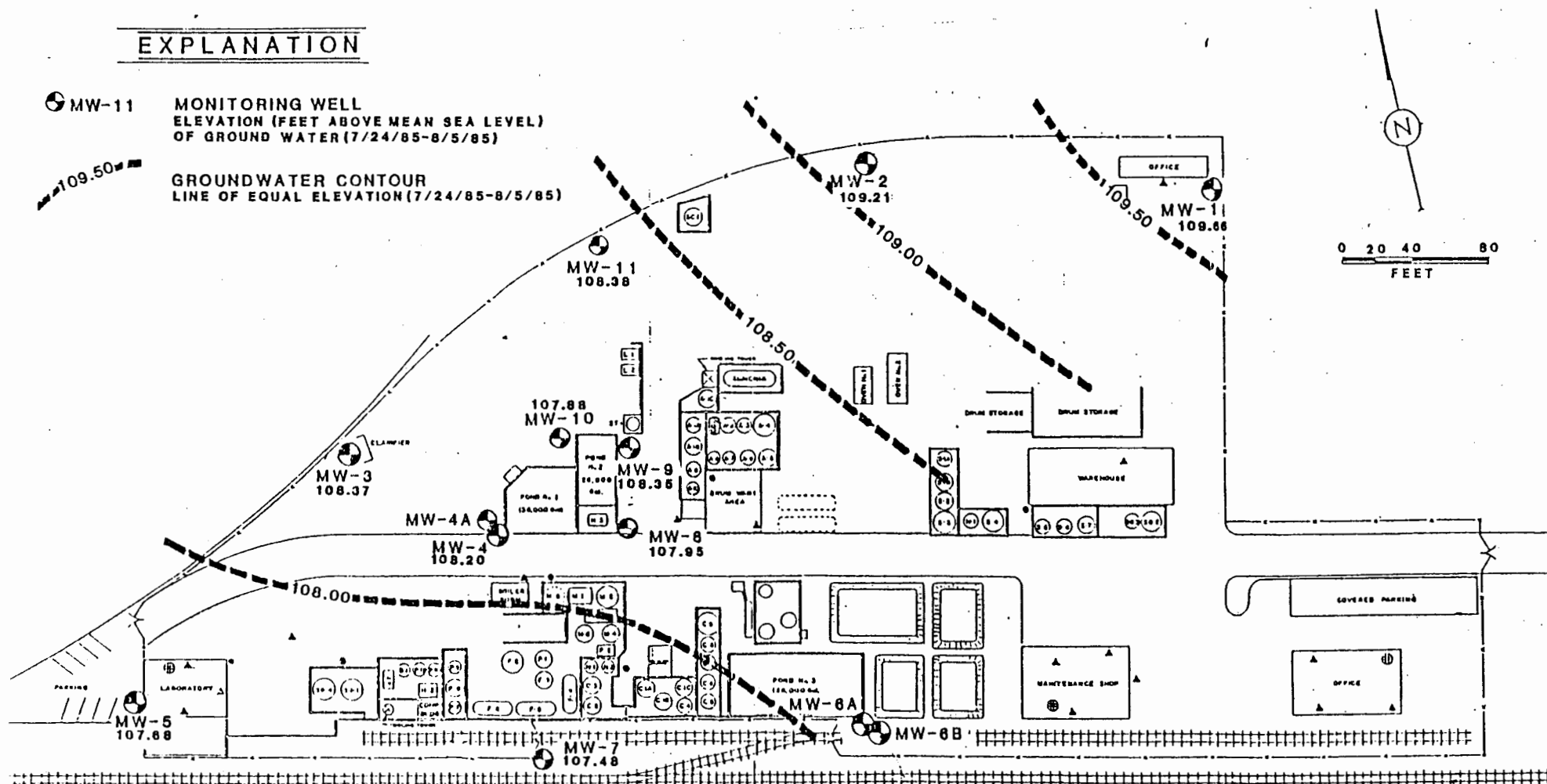
GROUNDWATER CONTOUR
LINE OF EQUAL ELEVATION ON 4/9/85



EXPLANATION

 MW-11 MONITORING WELL
 ELEVATION (FEET ABOVE MEAN SEA LEVEL)
 OF GROUND WATER (7/24/85-8/5/85)

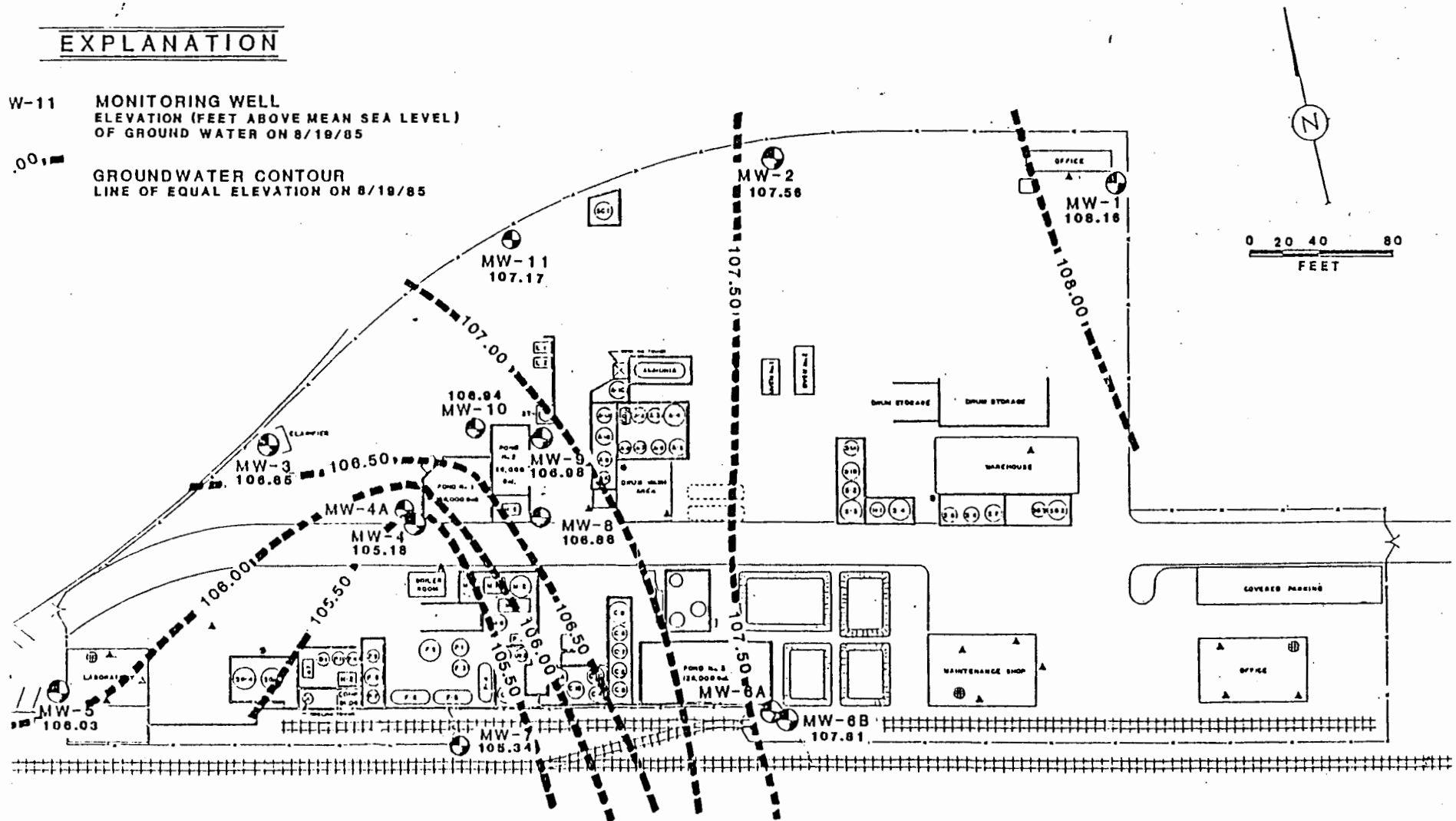
 GROUNDWATER CONTOUR
 LINE OF EQUAL ELEVATION (7/24/85-8/5/85)



EXPLANATION

W-11 MONITORING WELL
ELEVATION (FEET ABOVE MEAN SEA LEVEL)
OF GROUND WATER ON 8/19/85

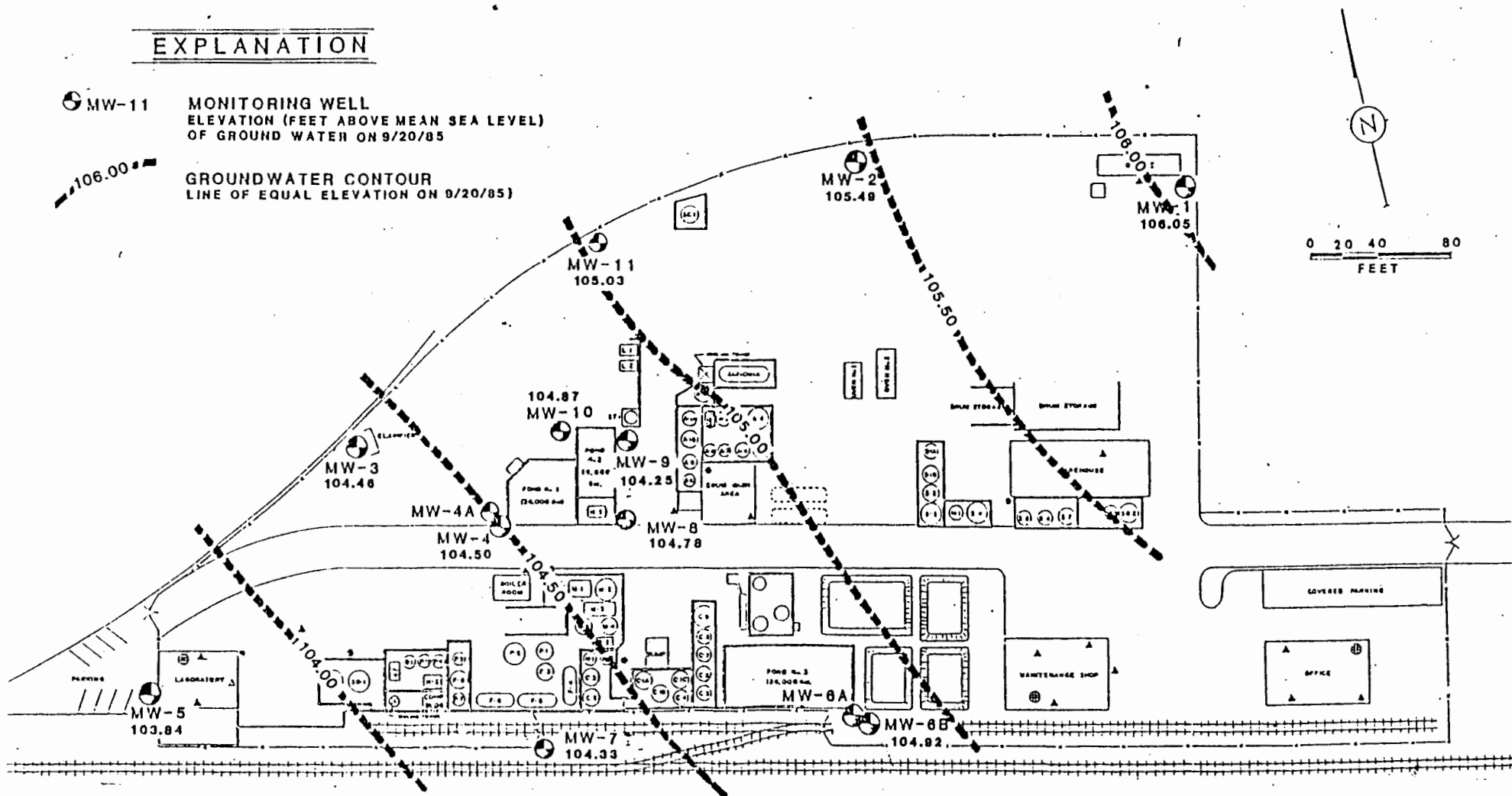
GROUNDWATER CONTOUR
LINE OF EQUAL ELEVATION ON 8/19/85



EXPLANATION

 MW-11
 MONITORING WELL
 ELEVATION (FEET ABOVE MEAN SEA LEVEL)
 OF GROUND WATER ON 9/20/85

 106.00
 GROUNDWATER CONTOUR
 LINE OF EQUAL ELEVATION ON 9/20/85



APPENDIX G

CHEMICAL USED IN POND 1 AND WASTEWATER NEUTRALIZATION SYSTEM PROCESSES

CHEMICALS USED IN POND NUMBER 1

Ammonium sulfate solution

Sodium chloride solution

Ferrous hydroxide solution

Copper ammonium chloride solution

Chromic-sulfuric acid solution*

Sodium sulfate solution

Sulfuric acid solution

Ammonium chloride

Free Ammonia

Copper sulfide

Iron sulfide

Chrome sulfide

Nickel sulfide

Zinc sulfide

Lead sulfide

Metals, such as Fe, Sn, Zn, Ni,
 H, Cu, Cr, As, etc.

Reactions, Quantities, Frequencies of
 Chemicals in SCC's Wastewater Neutralization System

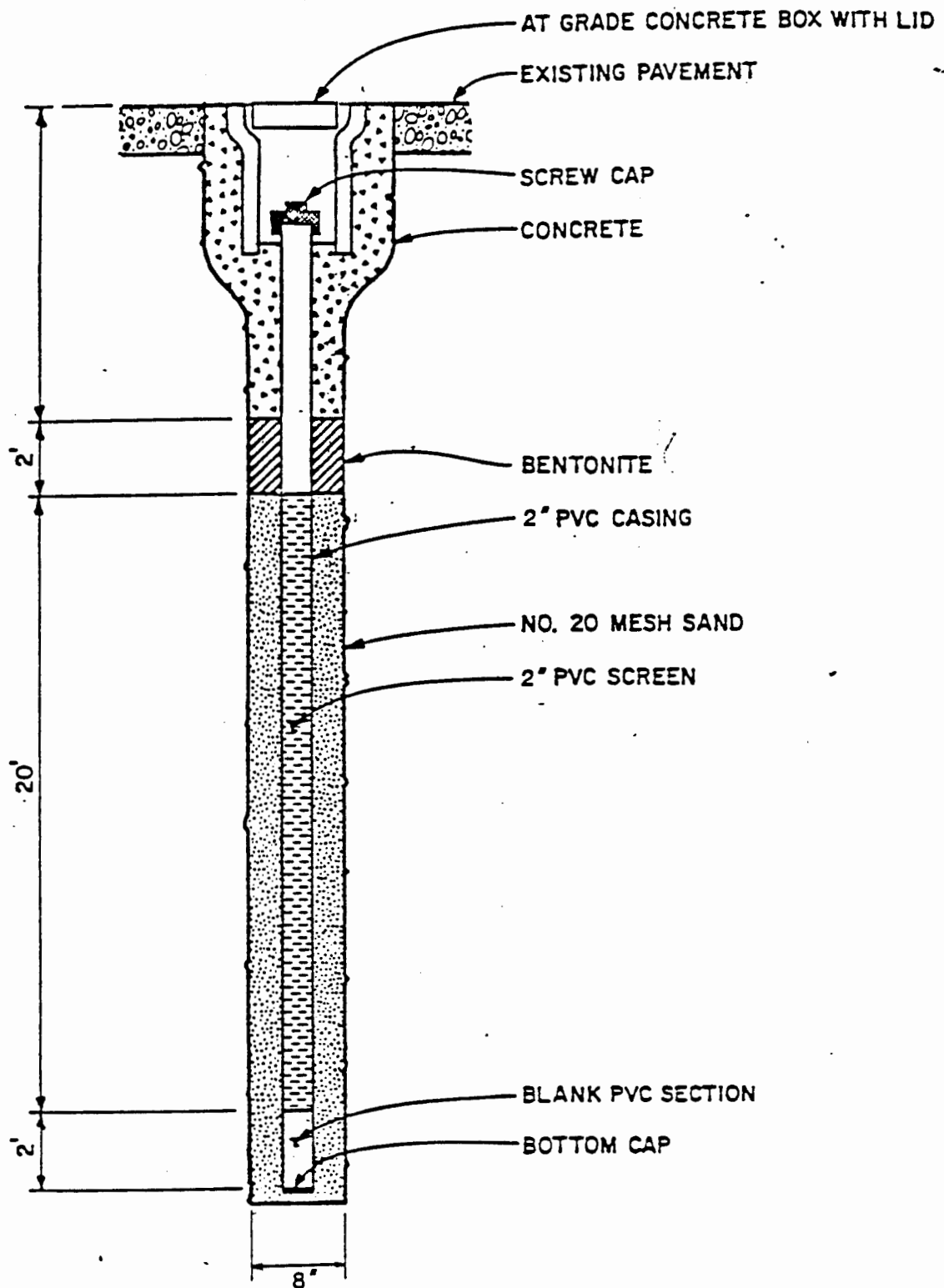
Quantity	SCC Materials (Prior to Pretreatment as Required by EPA & LACSD)	pH 13-14 Solution In Tank Prior to Treatment	Neutralization*	Metals Precipitation (By Addition of Reducing Agent such as Sodium Sulfide)	Solution After Precipitation	Oxidation If Needed	Effluent Discharged to LACSD 22,000-27,000 gpd pH above 6
1.0-1000 gpd	Ferric chloride solution, $FeCl_3$ (may contain metals such as Ni, Zn, Cr, Pb, Sn, As, etc., e.g.)	~8% $FeOH$ $NaCl$ → (as result of exposure to h ₂ pH media)	→	+ Na_2S → $FeOH$, PbS , NiS , SnS , CrS , ZnS , AsS + $NaCl$		→	
2	(Ferrous chloride solution, $FeCl_2$ (same as above))						
3.15-2000 gpd	10% sodium chloride solution	$NaCl$ →	→				
4	1-2% sodium hydroxide solution	$NaOH$ →	+ H_2SO_4 (w/ or w/o H)	+ Na_2S → PbS , AsS , FeS	+ $(NH_4)_2SO_4$ &/or Na_2SO_4	→	
5	Residual sodium carbonate	$NaCO_3$ →	+ HCl (w/ or w/o H)	+ Na_2S → TiS , FeS , SnS	+ NH_4Cl &/or $NaCl$	→	
6	Ammonium hydroxide	NH_4OH →	+ H_3PO_4 (w/ or w/o H)	+ Na_2S → HS	+ $(NH_4)_2HPO_4$ &/or Na_2HPO_4	→	
7	<1% free ammonium chloride soln	NH_4Cl →	+ HNO_3 (w/ or w/o H)	+ Na_2S → HS	+ NH_4NO_3 &/or $NaNO_3$	→	
8	<1% free ammonia + other water	$NH_3 + H_2O$ →	Citric acid (w/ or w/o H)	+ Na_2S → HS	+ Ammonium citrate &/or sodium citrate	→	
9	Cupric ammonium chloride solution	$Cu-2(NH_3)_2(NH_4)Cl_2$ →	→	+ Na_2S → CuS	+ $2NH_4OH$ - $2NH_4Cl$	→	
10.0-2000 g/mo	1-2% ammonium sulfate solution**	$(NH_4)_2SO_4$ →	→				
11.0-200 gpd	Ammonium bifluoride soln, NH_4HF_2 pH 3; w/Sn, Pb, Cu, etc.	NH_4F → (as result of exposure to h ₂ pH media)	→	+ Na_2S → SnS , PbS , CuS	+ NH_4F	→	$2NH_4F$
12.0-100 gpd	Nickel sulfate solution	$NiSO_4$ →	→	+ Na_2S → NiS	+ $(NH_4)_2SO_4$ &/or Na_2SO_4	→	
13.0-100 gpd	Zinc sulfate solution	$ZnSO_4$ →	→	+ Na_2S → ZnS	+ $(NH_4)_2SO_4$ &/or Na_2SO_4	→	
*May add any of the neutralizing acids listed in this column, alone or in combinations; may contain metals. **Normally sold rather than discharged.							

DATE 25

APPENDIX H

TYPICAL WELL CONFIGURATION DRAWINGS AND BORING LOGS

Quantity	SCC Materials (Prior to Pretreatment as Required by EPA & LACSD)	pH 13-14 Solution in Tank Prior to Treatment	Neutralization*	Metals Precipitation (By Addition of Reducing Agent such as Sodium Sulfide)			Solution After Precipitation	Oxidation If Needed	Effluent Discharged to LACSD 22,000-27,000 gpd pH above 6	
1.0-1000 gpd	Ferric chloride solution, $FeCl_3$ (may contain metals such as Hg, Zn, Cr, Pb, Sn, As, etc., e.g.)	~8% FeOH + NaCl → (as result of exposure to hi pH media)		+ Na_2S →	$FeOH$, PbS , HgS , SnS , $Cr^{+3}S$, ZnS , AsS	+ NaCl				
2.	(Ferrous chloride solution, $FeCl_2$ (same as above)									
3.15-2000 gpd	10% sodium chloride solution	NaCl →								
4.	1-2% sodium hydroxide solution	NaOH →	+ H_2SO_4 (w/ or w/o H)	+ Na_2S →	PbS , AsS , FeS		+ $(NH_4)_2SO_4$ &/or Na_2SO_4			
5.	Residual sodium carbonate	$NaCO_3$ →	+ HCl (w/ or w/o H)	+ Na_2S →	TiS , FeS , SnS		+ NH_4Cl &/or NaCl			
6.	Ammonium hydroxide	NH_4OH →	+ H_3PO_4 (w/ or w/o H)	+ Na_2S →	HS		+ $(NH_4)_2HPO_4$ &/or Na_2HPO_4			
7.	<1% free ammonium chloride soln	NH_4Cl →	+ HNO_3 (w/ or w/o H)	+ Na_2S →	HS		+ NH_4NO_3 &/or $NaNO_3$			
8.	<1% free ammonia + other water	$NH_3 + H_2O$ →	Citric acid (w/ or w/o H)	+ Na_2S →	HS		+ Ammonium citrate &/or sodium citrate			
9.	Cupric ammonium chloride solution	$Cu \cdot 2(NH_4)Cl_2$ →		+ Na_2S →	CuS		+ $2NH_4OH$ - $2NH_4Cl$			
10.0-2000 g/mo	1-2% ammonium sulfate solution**	$(NH_4)_2SO_4$ →								
11.0-200 gpd	Ammonium bifluoride soln, NH_4HF_2 pH 3; w/Sn, Pb, Cu, etc.	NH_4F → (as result of exposure to hi pH media)		+ Na_2S →	SnS , PbS , CuS		+ NH_4F		$2NH_4F$	
12.0-100 gpd	Nickel sulfate solution	$NiSO_4$ →		+ Na_2S →	NiS		+ $(NH_4)_2SO_4$ &/or Na_2SO_4			
13.0-100 gpd	Zinc sulfate solution	$ZnSO_4$ →		+ Na_2S →	ZnS		+ $(NH_4)_2SO_4$ &/or Na_2SO_4			
*May add any of the neutralizing acids listed in this column, alone or in combinations; may contain metals. **Normally sold rather than discharged.										



NOT TO SCALE

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



2" PVC MONITORING WELL TYPICAL WELL CONFIGURATION

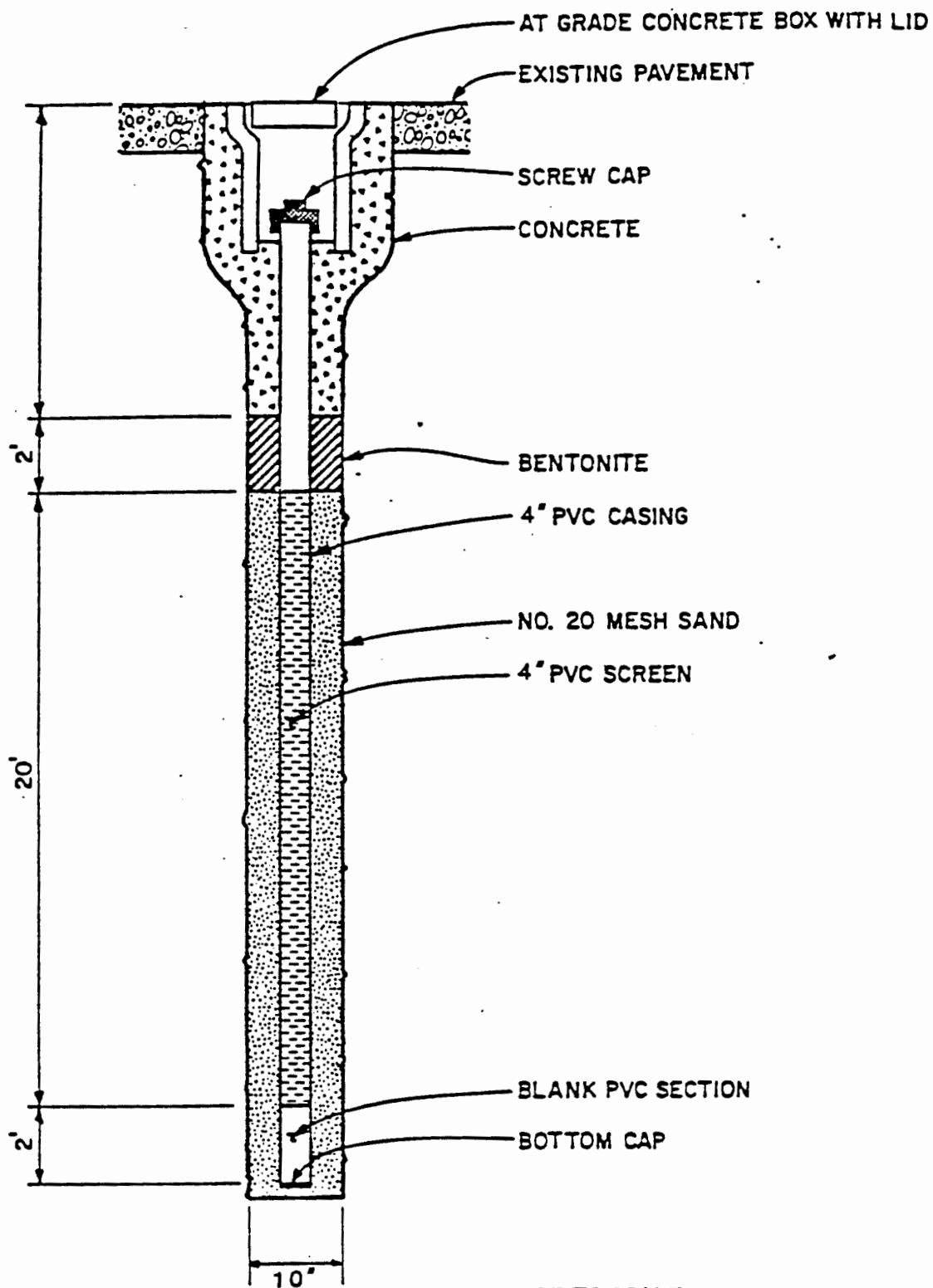
PLATE

3


PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO.



NOT TO SCALE

J.H. KLEINFELDER & ASSOCIATES 
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

4" PVC MONITORING WELL TYPICAL WELL CONFIGURATION

PLATE

4

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO.

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0			GC	gravely clay, black, 4" asphalt dry	locking well cap PVC cap
5	32	1	ML	clay, brown-black, very stiff, dry	cement grout
10	27	2	ML	silty clay, red-brown, very stiff, dry	blank PVC casing
15	39	3	SC	clayey sand, brown, dense, dry	
20	68	4	SP	sand, med., fine, white, very dense dry	
25	70	5	SP	sand, fine-med., very dense, dry	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
Santa Fe Springs, Ca.

PLATE

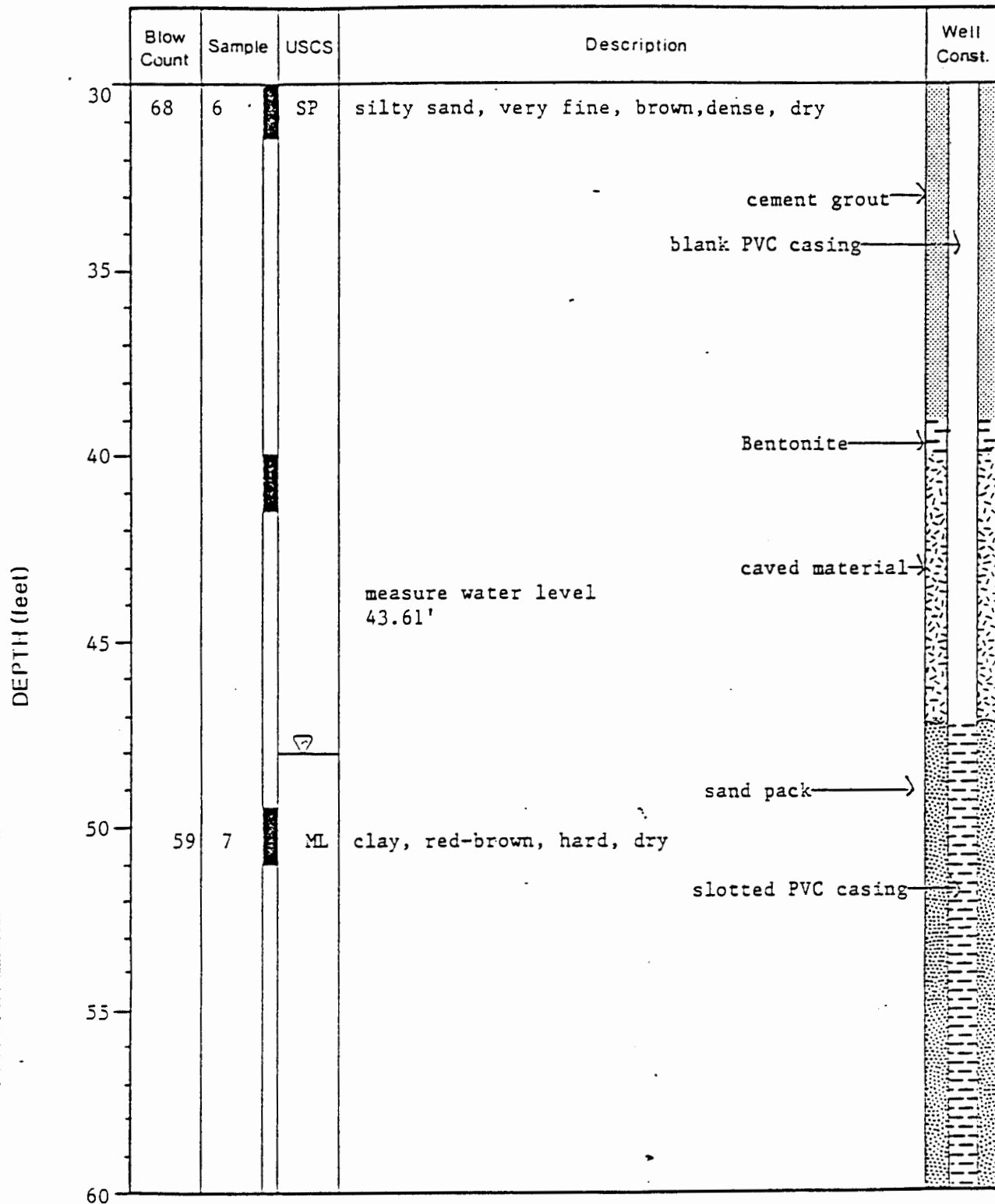
5

LOG of BORING MW-1

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
Santa Fe Springs, Ca.

PLATE

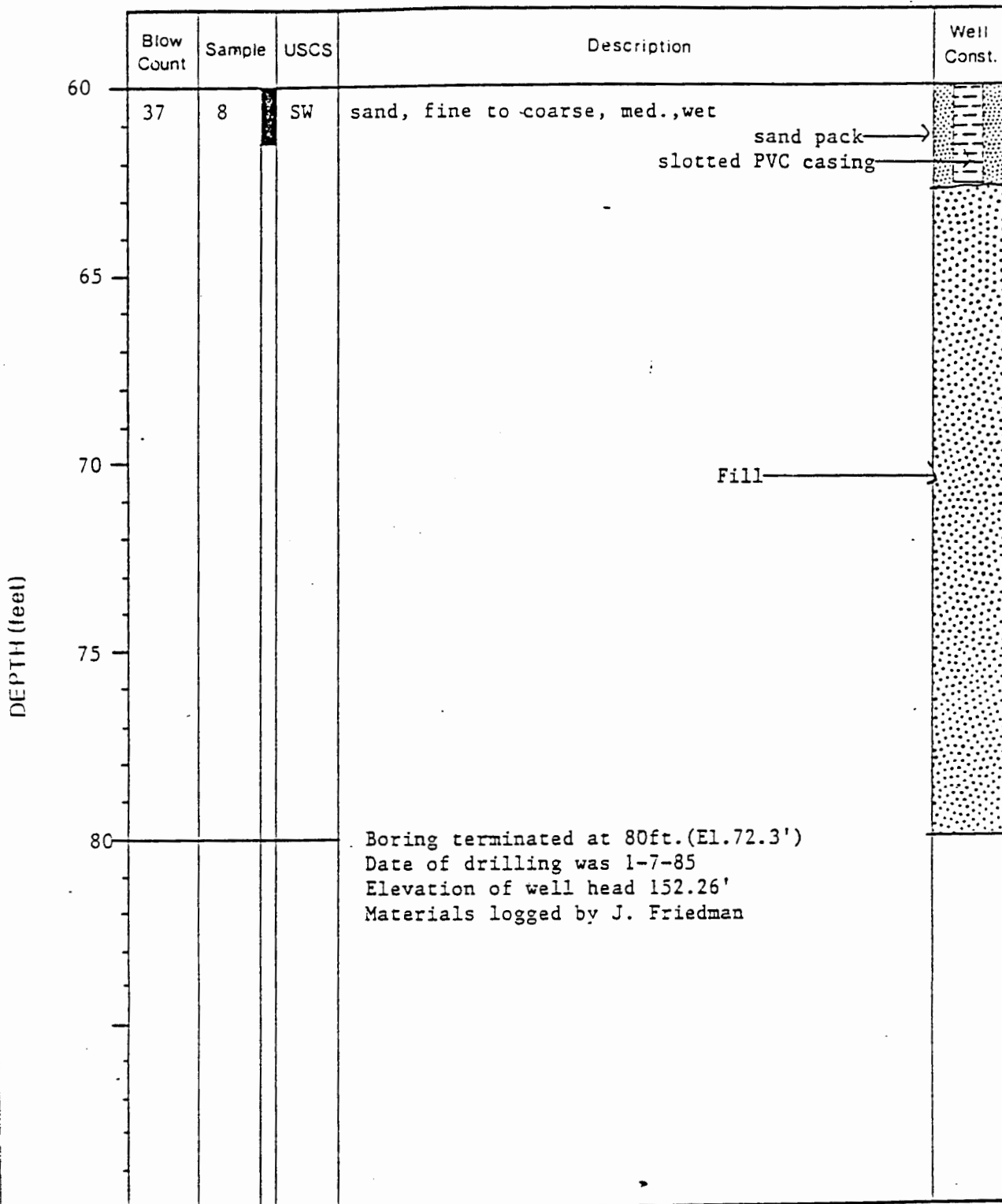
5

LOG of BORING MW-1

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs, Ca.

PLATE

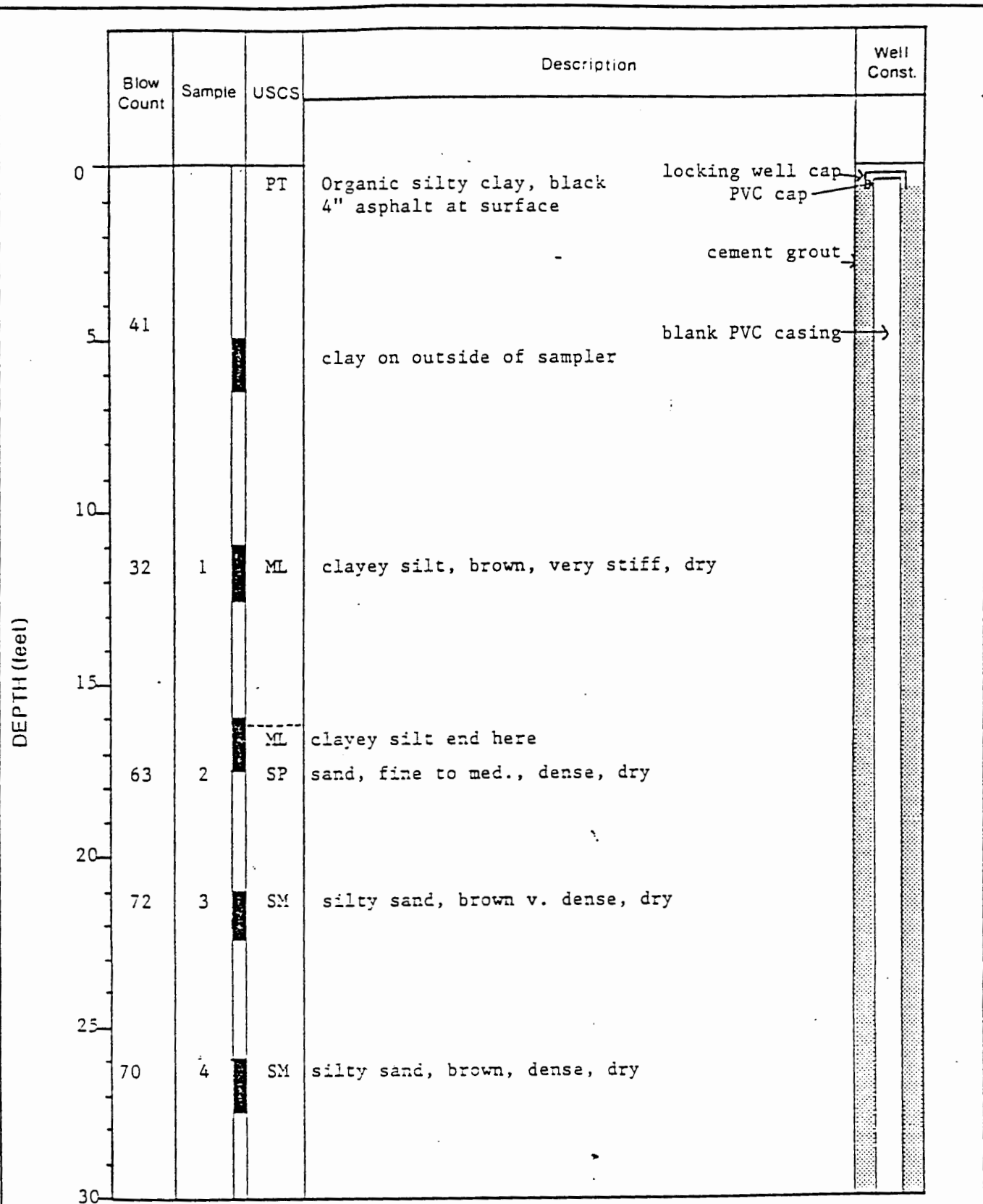
5

LOG of BORING MW-1

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1



J.H. KLEINFELDER & ASSOCIATES GEOTECHNICAL CONSULTANTS • MATERIALS TESTING		So. Calif. Chemical Santa Fe Springs	PLATE <div style="font-size: 2em; text-align: center;">6</div>	
PREPARED BY: JF DATE: 5/85		LOG of BORING MW-2		
CHECKED BY: DATE:		PROJECT NO. Q-1014-1		

	Blow Count	Sample	USCS	Description	Well Const.
30			SM	end of sm	
	48	5	CL	clay, brown, hard, dry	
				cement grout	
				blank PVC casing	
35					
				Bentonite	
				sand pack	
40	25	6	CL	clay, brown, very stiff, dry	
45					
				slotted PVC casing	
50	44	7	ML SC	sandy clay brown, hard, moist clayey sand, med. to fine brown moist	
55					
60					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical
Santa Fe Springs, Ca.

LOG of BORING MW-2

PLATE

6

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. 0-1014-1

DEPTH (feet)

Blow Count	Sample	USCS	Description	Well Const.
60	57	8	SP sand fine, gray, dense, wet	<p>sand pack</p> <p>slotted PVC casing</p> <p>caved material</p>
65				
70				
75				
80				
85				
90				

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical
 Santa Fe Springs, Ca.

PLATE

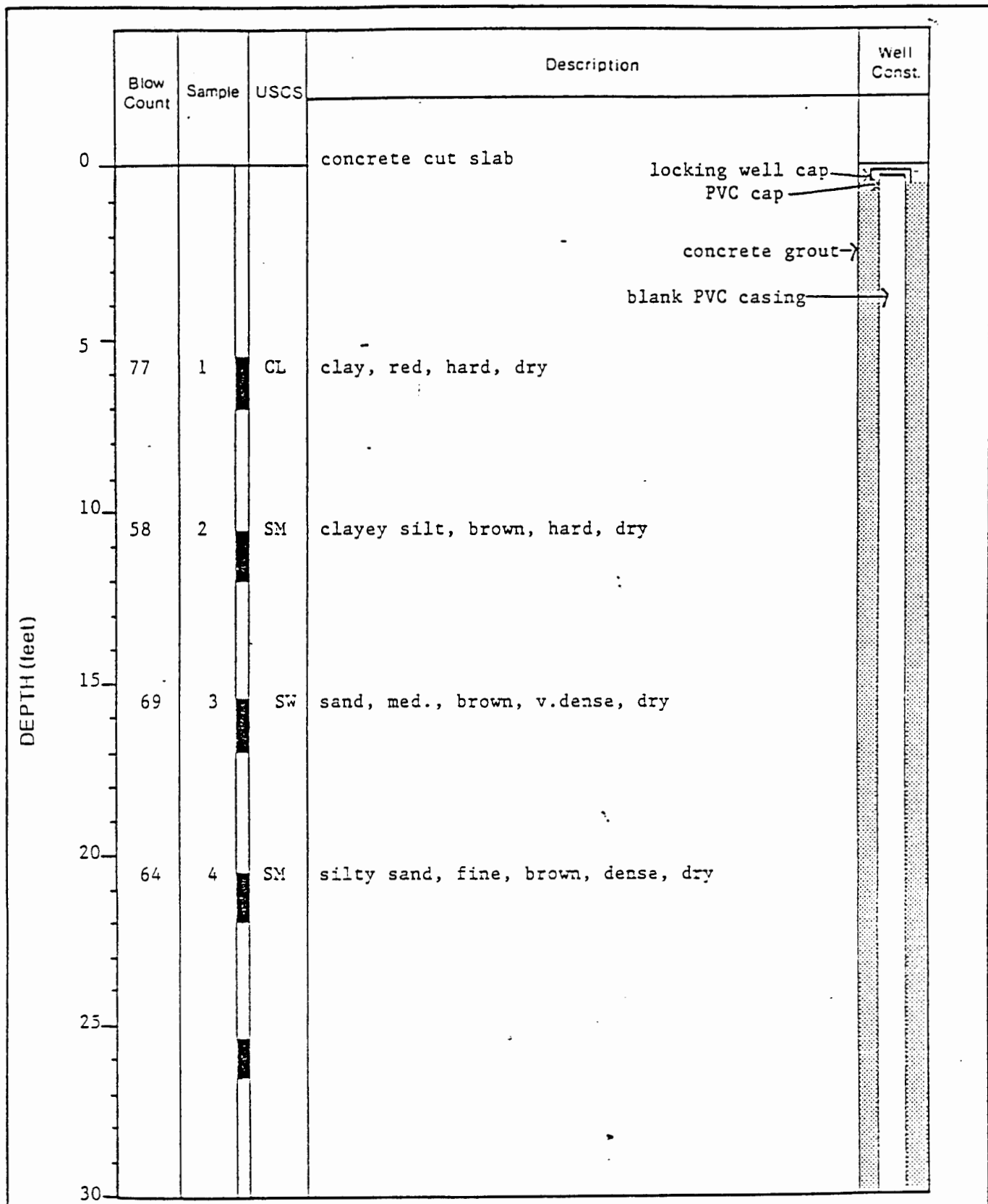
6

LOG of BORING MW-2

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1041-1



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

So. Calif. Chemical
 Santa Fe Springs

PLATE

LOG of BORING MW-3

7

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

DATE 11/10/85

Blow Count	Sample	USCS	Description	Well Const.
30	62/6	6	SW sand, med., coarse, gray, white v.dense, dry	
35				
40	64	7	CL clay, brown, hard, dry	
45				
50	40	8	ML clayey silt, some v.fine sand brown, dense, dry	
55				
60				

bottom of clay

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

So. Calif. Chemical
 Santa Fe Springs

PLATE

LOG of BORING MW-3

7

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. 0-1014-1

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
60	52/6	10	SM	silty sand, v.fine, brown, very dense wet sand pack slotted PVC casing	
65					
70					
75	50/6	10	SW	sand, fine-med., brown V. dense, wet Boring terminated at 75 ft. (El. 76.6') Date of drilling was 1-16-85 Elevation of well head 151.62' Materials logged by J. Friedman	

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs

LOG of BORING MW-3

PREPARED BY: JF

DATE: 5/85

CHECKED BY:

DATE:

PROJECT NO. Q-1014-1

PLATE

7

Bore Count	Sample	USCS	Description	Well Const.
		SC	clayey sand, black lft.	locking well cap PVC cap
				cement grout
				blank PVC casing
38	1	CL	clay, red, v.stiff, dry	
27	2	ML	silty clay, red, v.stiff, dry	
20	3	SM	silty sand, white, dense, dry	
14	4	SM	silty sand, fine, white, v. dense, dry	
11	5	SM	silty sand, med.,fine, brown, v.dense dry	

WILDER & ASSOCIATES



So. Calif. Chemical
Santa Fe Springs, Ca.

PLATE

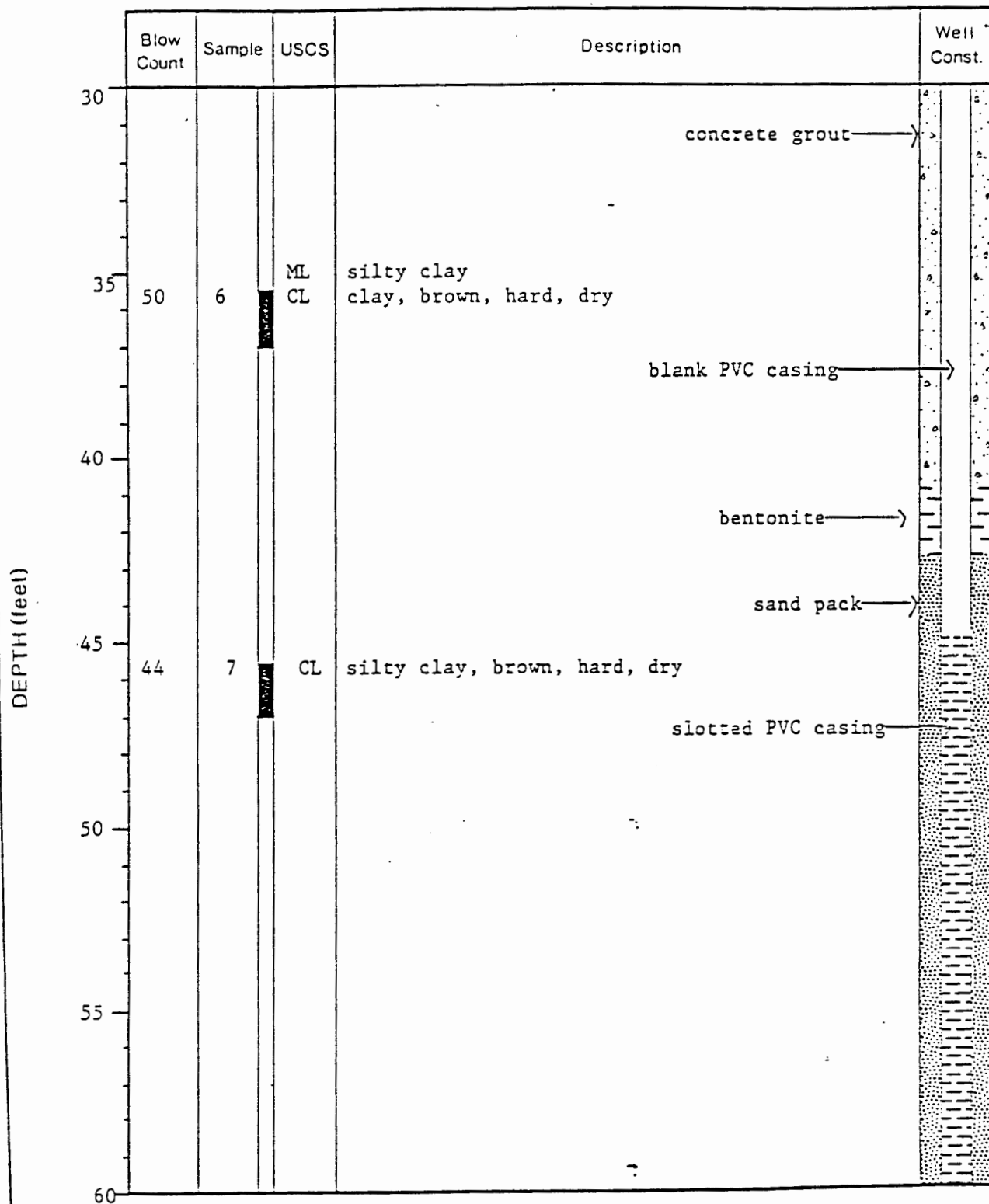
8

DATE 5/85

LOG of BORING MW-4

DATE

PROJECT NO. Q-1014-1



I.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs, Ca.

PLATE

8

LOG of BORING MW-4

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. 0-1014-1

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
60	88/5	8	SM	silty sand, fine, brown, v.dense, wet sand pack → slotted PVC casing →	
65					
70					
75				Boring terminated at 75 ft (El.75') Date of drilling 1-16-85 Elevation of well head 149.76' Materials logged by J.Friedman	

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs, Ca.

PLATE

8

LOG of BORING MW-4

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0				6" Concrete Lock well cap PVC cap	
5	10	5	ML	Silt with fine sand, brown, stiff, moist	
10	23	10	ML/SP	Sandy silt/silty sand, brown, dense, moist	
15	41	15	SP	Sand: medium - coarse sand, brown, very dense, dry	
				Blank PVC casing Concrete grout	
20	66	20	SP	Sand, coarse to medium sand, light brown, very dense, dry-damp	
25	98+	25	SP	Medium-coarse sand, light brown-tan, very dense, dry-moist	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



Southern California Chemical

PLATE

LOG of BORING MW-4A

9

PREPARED BY:

DATE:

CHECKED BY:

DATE:

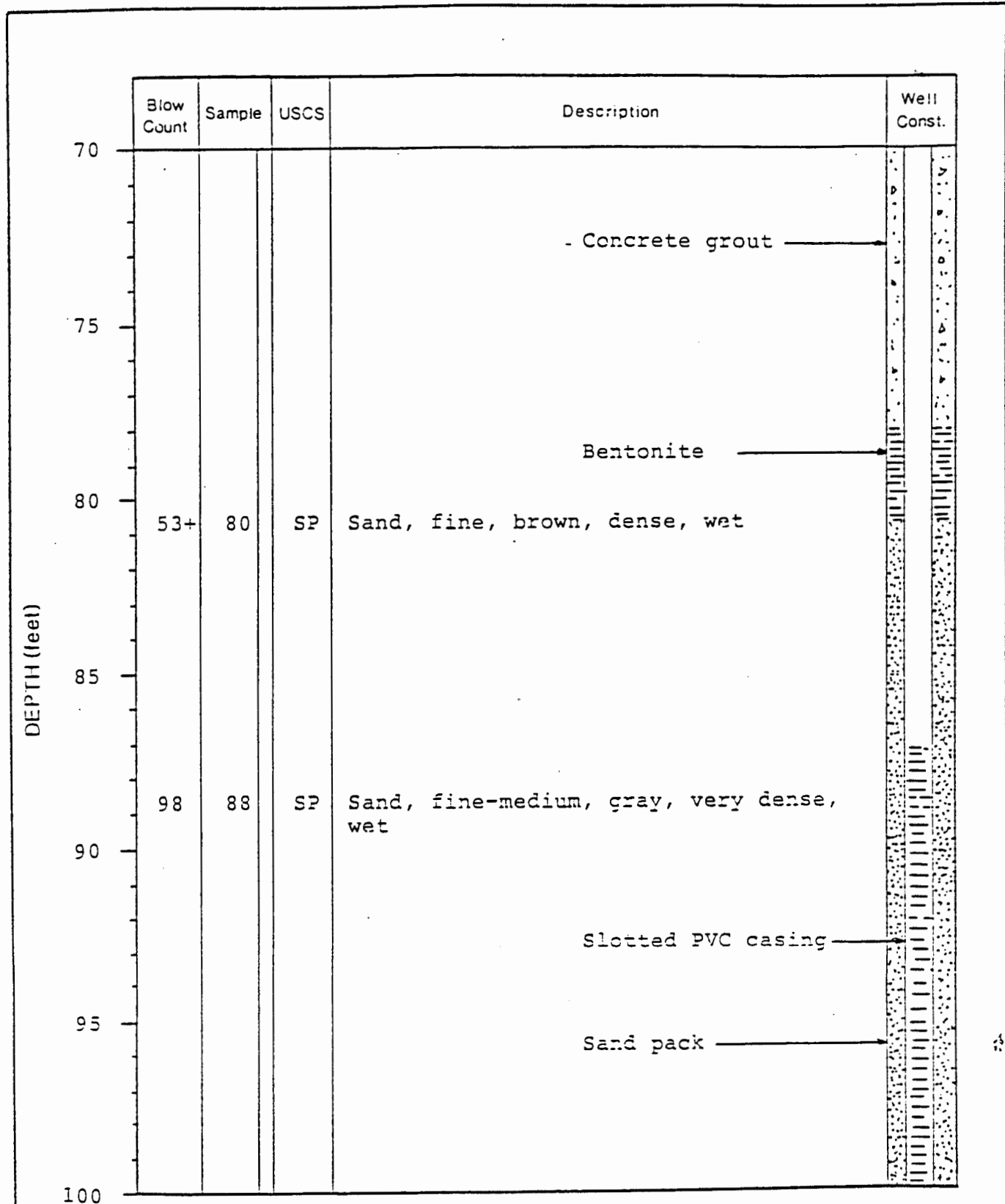
PROJECT NO. Q-1014-2

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
35	80	35	ML/CL	Clayey silt/silty clay, dark brown, very stiff-hard, very moist	
40					
45	80	45			
50					
55					
60					
65					

Blank PVC casing →

Concrete grout →

J.H. KLEINFELDER & ASSOCIATES GEOTECHNICAL CONSULTANTS • MATERIALS TESTING		Southern California Chemical LOG of BORING MW-4A		PLATE 9
PREPARED BY:	DATE:	PROJECT NO. Q-1014-2		
CHECKED BY:	DATE:			



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



Southern California Chemical

LOG of BORING MW-4A


PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q-1014-2

PLATE

9

	Blow Count	Sample	USCS	Description	Well Const.
100	82	100	ML	Silt & very fine sand, brown, very dense, wet	
				Slotted PVC casing	
105		105	ML	Silt, occasional clast 72cm, brown, dense, damp	
				Sand pack	
110	75	110		Silty sand, brown, very dense, wet	
	75		SM/SP	Sand, fine-medium, very dense, wet	
				Boring terminated at 110'. Date of drilling 7-10-85. Materials logged by Ken Durand.	

I.H. KLEINFELDER & ASSOCIATES 
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

Southern California Chemical

LOG of BORING MW-4A

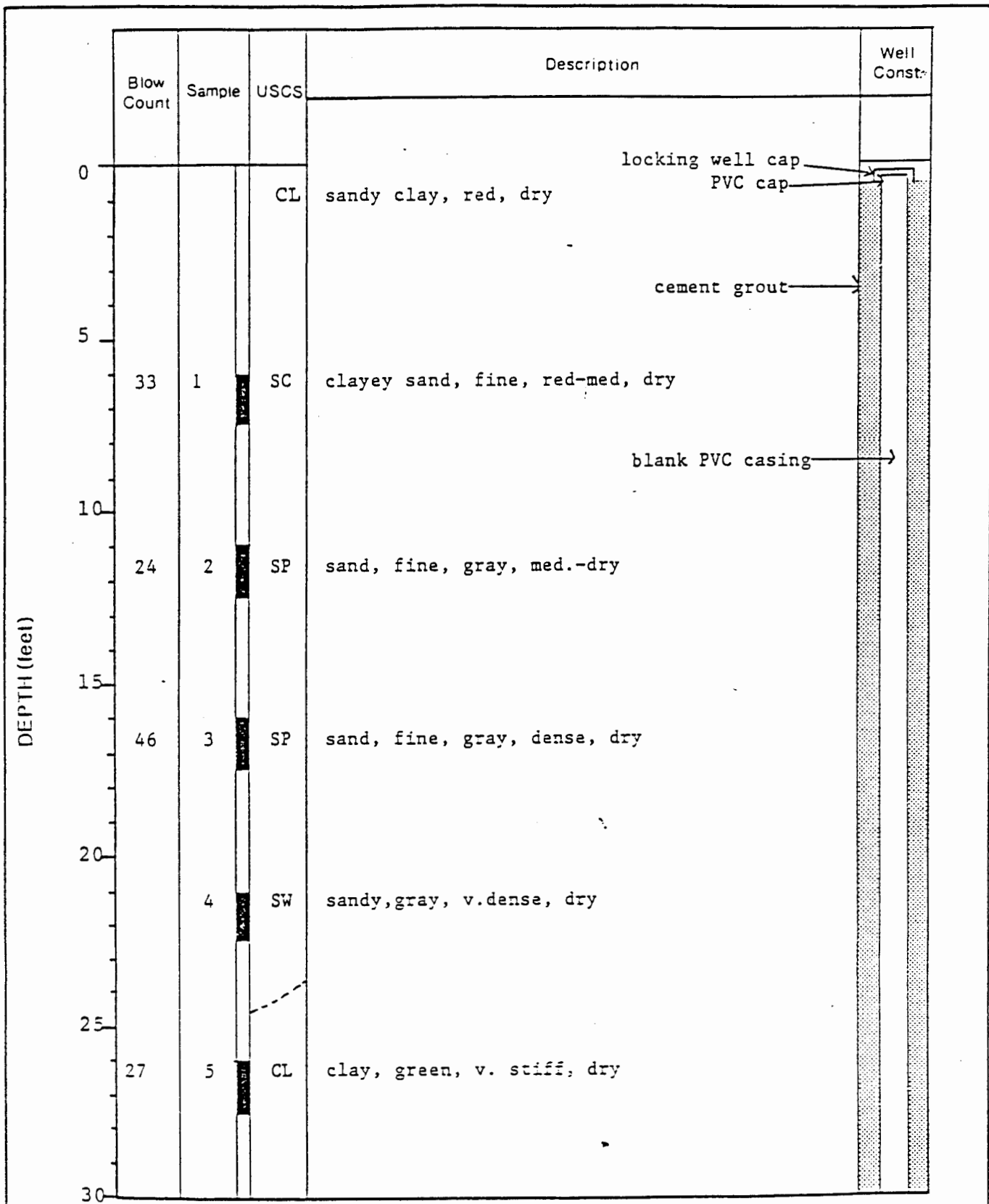
PLATE

9.

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q-1014-2



I.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

So. Calif. Chemical
 Santa Fe Springs

PLATE

10

PREPARED BY: JF DATE: 5/85

LOG of BORING MW-5

CHECKED BY: DATE:

PROJECT NO. 1014-1

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
30	72	6	CL SM	End of clay silty sand, v.fine, gray, dry	
35					
40					
			GM	silty gravel, brown, damp	
45					
	88	7	SW	gravely sand, med.-coarse, gray very dense, wet	
50					
55					
60					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
Santa Fe Springs

LOG of BORING MW-5

PLATE

10

PREPARED BY: JF

DATE: 5/85

CHECKED BY:

DATE:

PROJECT NO. 0-1014-1

DEPTH (feet)

	Blow Count	Sample	USCS	Description	Well Const.
60					
				sand pack →	
65			SW	sand, med to coarse, grain up to 1"	
				slotted PVC casing	
70					
75				Boring terminated at 75 ft. (El. 78')	
				Date of drilling was 1-13-85	
				Elevation of well head 153.21	
				Materials logged by J. Friedman	

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs

PLATE

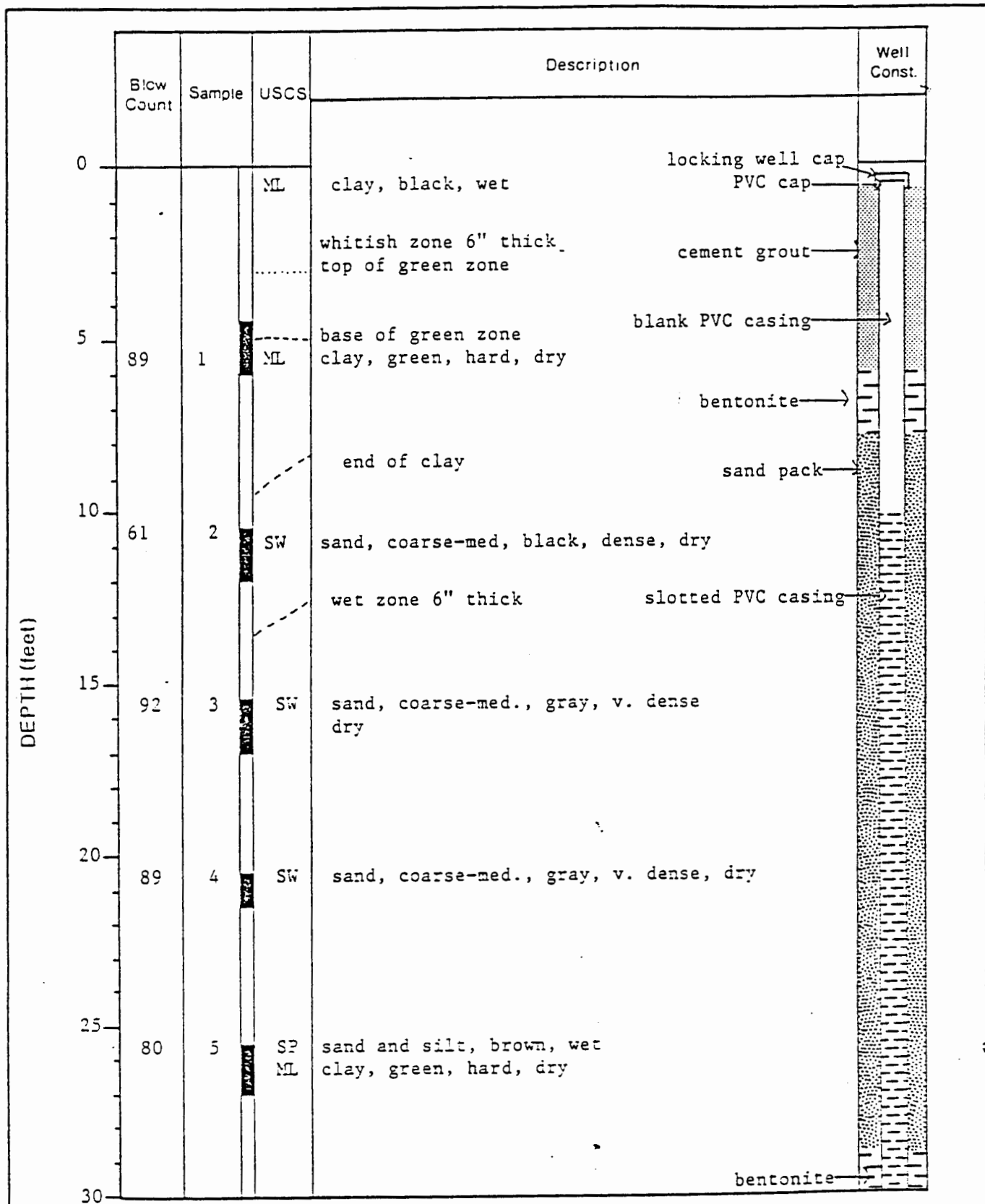
10

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

LOG of BORING MW-5

PROJECT NO. Q-1014-1



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
Santa Fe Springs, Ca.

PLATE

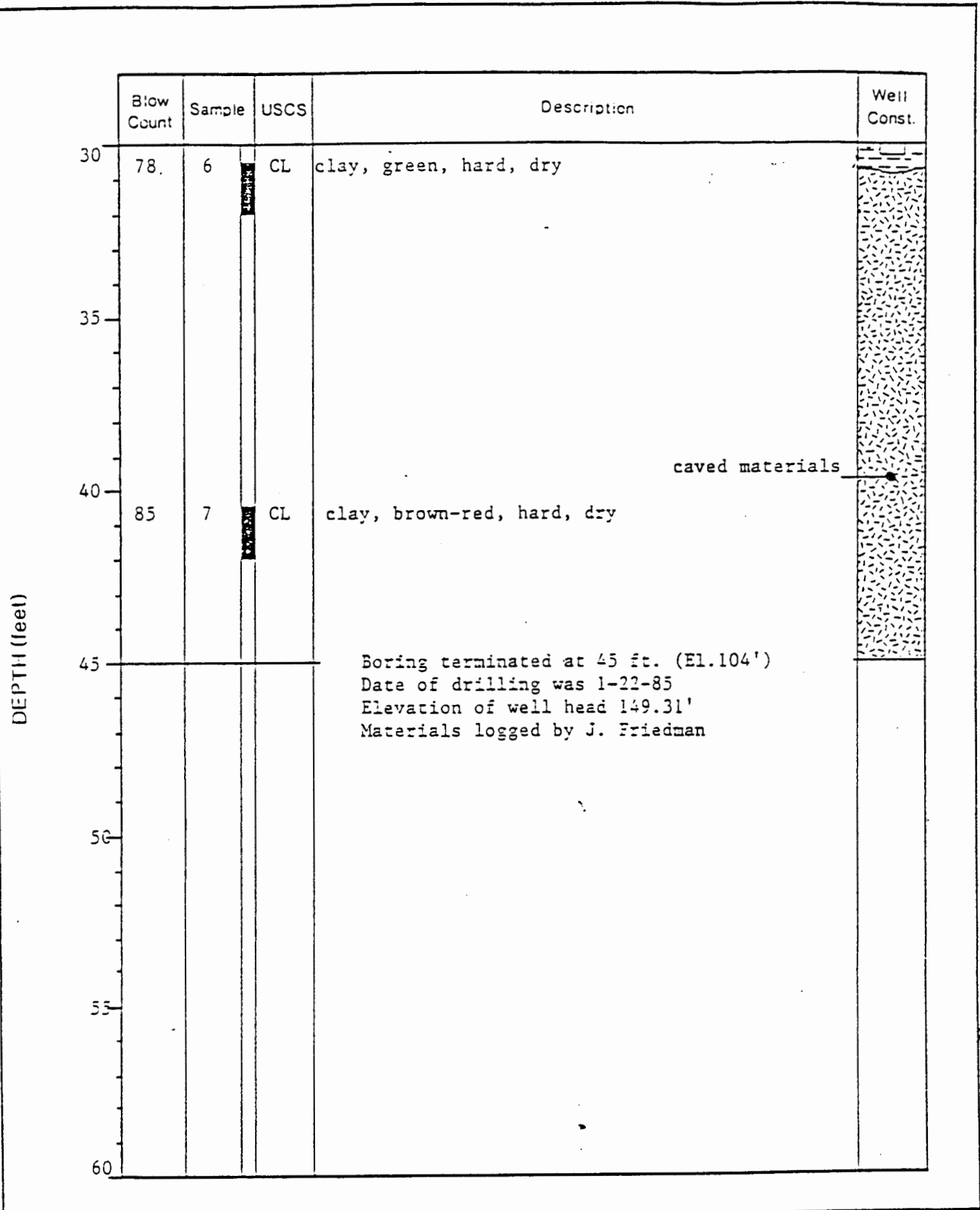
LOG of BORING MW-6A

11

PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1



I.H. KLEINFELDER & ASSOCIATES GEOTECHNICAL CONSULTANTS • MATERIALS TESTING		So. Calif. Chemical Santa Fe Springs, Ca.	PLATE 11	
PREPARED BY: JF DATE: 5/85		LOG of BORING MW-6A		
CHECKED BY: DATE:		PROJECT NO. Q-1014-1		

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0			ML	clay, black	locking well cap PVC cap
5			ML	clay, green, hard dry	cement grout blank PVC casing
10			SW	sand, coarse-med., black, dense, dry	
15			SW	sand, coarse-med., gray, v. dense, dry	
20			SW	sand, coarse-med., gray, v. dense, dry	
25			SP ML	sand and silt, brown, wet clay, green, hard, dry	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
Santa Fe Springs

PLATE

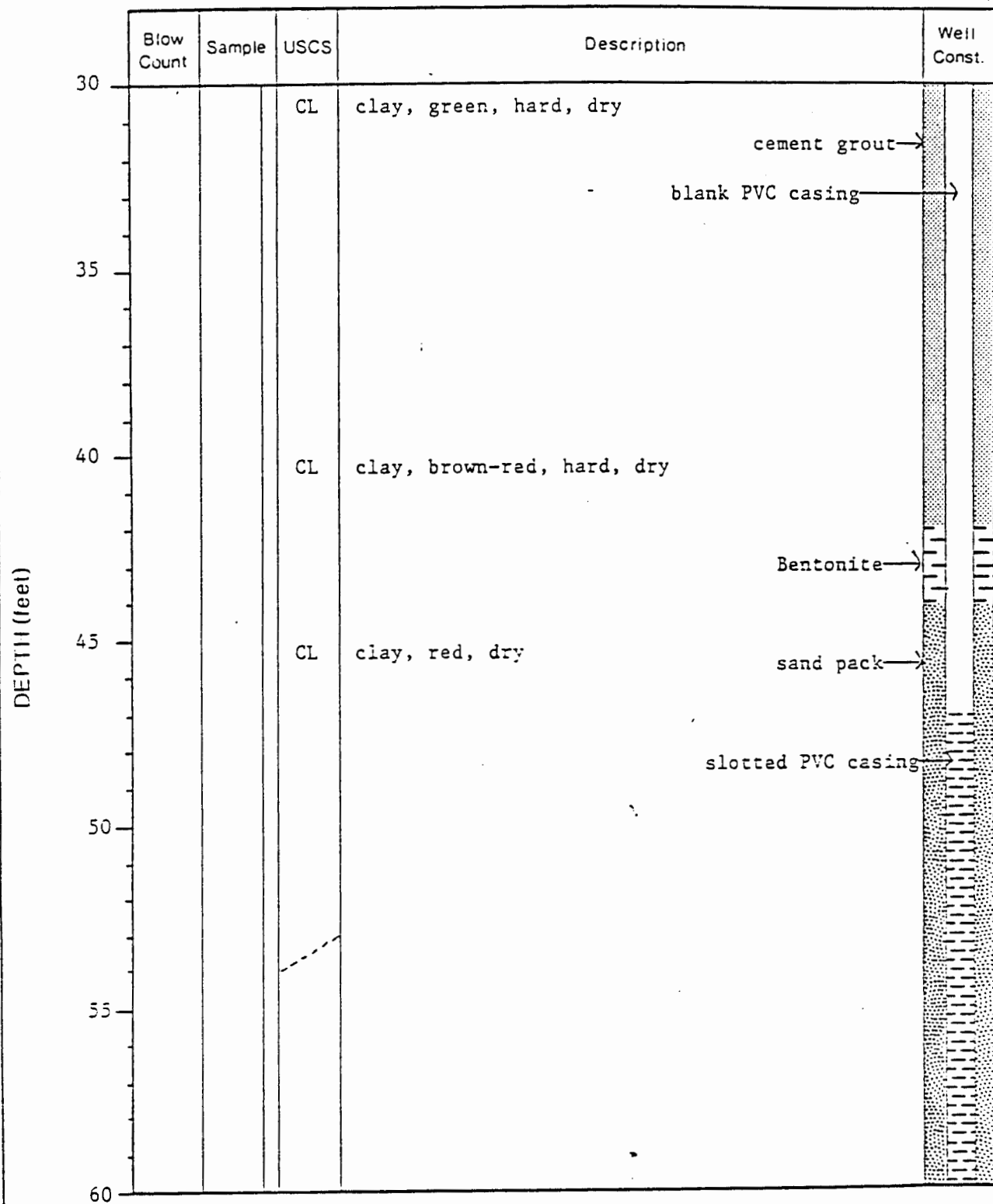
12

LOG of BORING MW-6B

PREPARED BY: JF DATE: May 85

CHECKED BY: DATE:

PROJECT NO. Q-1014-1



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING

So. Calif. Chemical
 Santa Fe Springs

LOG of BORING MW-6B


PREPARED BY: JF DATE: 5/85

CHECKED BY: DATE:

PROJECT NO. 0-1014-1

PLATE

12

	Blow Count	Sample	USCS	Description	Well Const.
60	52/6	1	Sw	sand, med.-fine, white, v. dense wet	 <p>sand pack</p> <p>slotted PVC casing</p>
65					
70					
75					
80				Boring terminated at 80 feet (El± 69.5 ft) Date of drilling was 1-22-85 elevation of well head 149.46ft materials logged by J. Friedman	

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Calif. Chemical
 Santa Fe Springs

LOG of BORING MW-6B

PREPARED BY: JF

DATE: 5/85

CHECKED BY:

DATE:

PROJECT NO. 1014-1

PLATE

12

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0				Pebbles	
				Locking well cover PVC cap	
5	16	5	ML	Sandy silt, silt with fine sand, Lt. brown, med. damp	
				Cement	
10	40	10		Blank PVC well casing	
15	25	15	SP	Sand, med. to fine sand, tan, loose, damp	
20	62	20	SP	Sand, med., Lt. tan, dense, damp	
25	67	25	SP	Sand, med. to fine, Lt. brown-tan, very dense, damp	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical
SANTA FE SPRINGS, CALIFORNIA
LOG of BORING MW-7

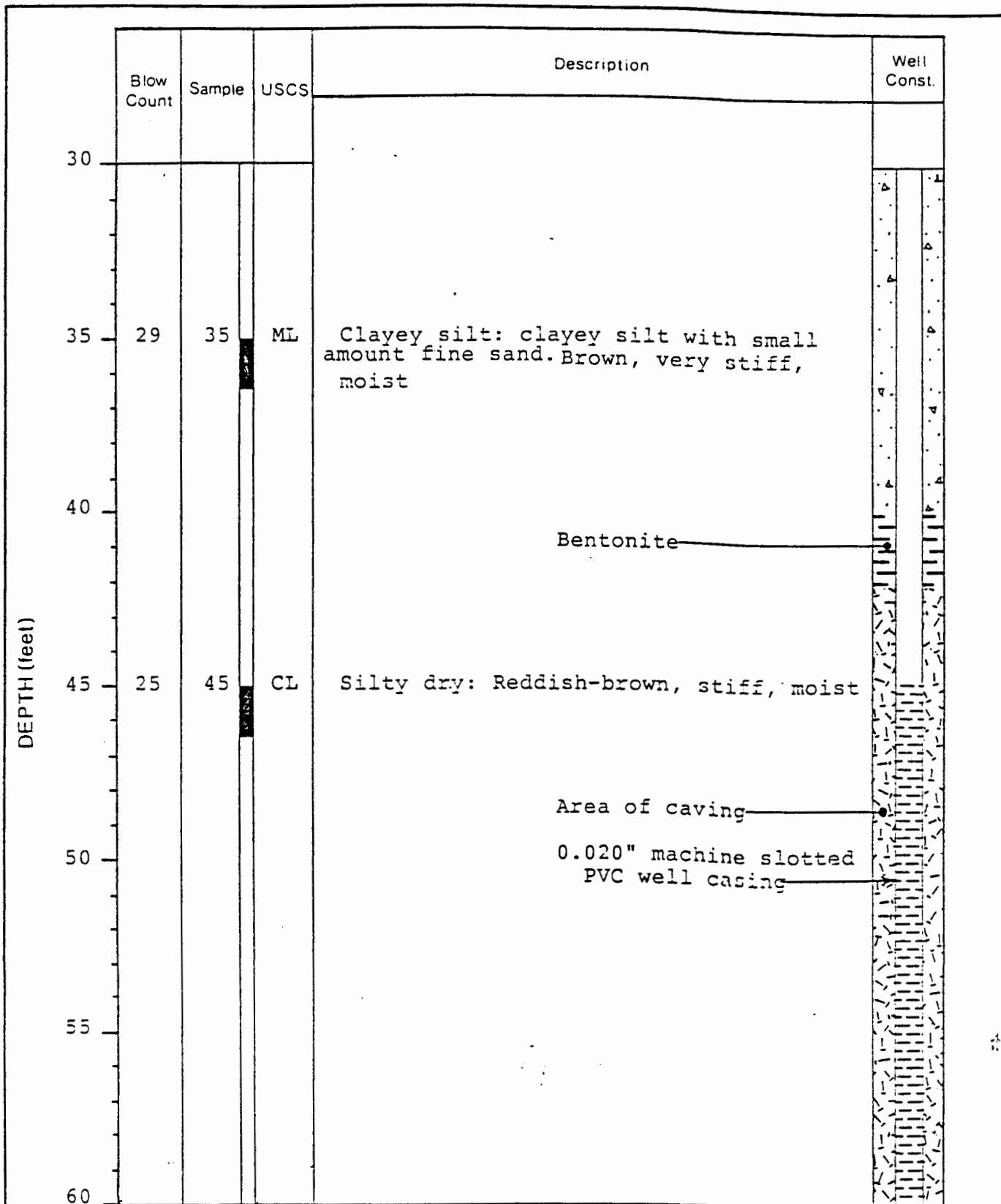
PLATE

13

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q1014-2



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical
SANTA FE SPRINGS, CALIFORNIA
LOG of BORING MW-7

PLATE

13

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q1014-2

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0				6" concrete Lock well cap PVC cap	
5	15	5	ML	Silt: Silt with fine sand, black medium stiff, moist	
				Cement grout Blank PVC casing	
10	42	10	ML	Silt: silt with fine sand, black-dk. brown, stiff to moist.	
15	38	15	SP	Sand: fine sand, dk. grey, dense moist	
20	94	20	SP	Sand: fine to med. sand grey, hard, moist	
25	90/ 5	25	SW	Sand: coarse sand/gravilly sand, grey-white, v. dense, damp	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical
SANTA FE SPRINGS, CALIF.

LOG of BORING MW-8

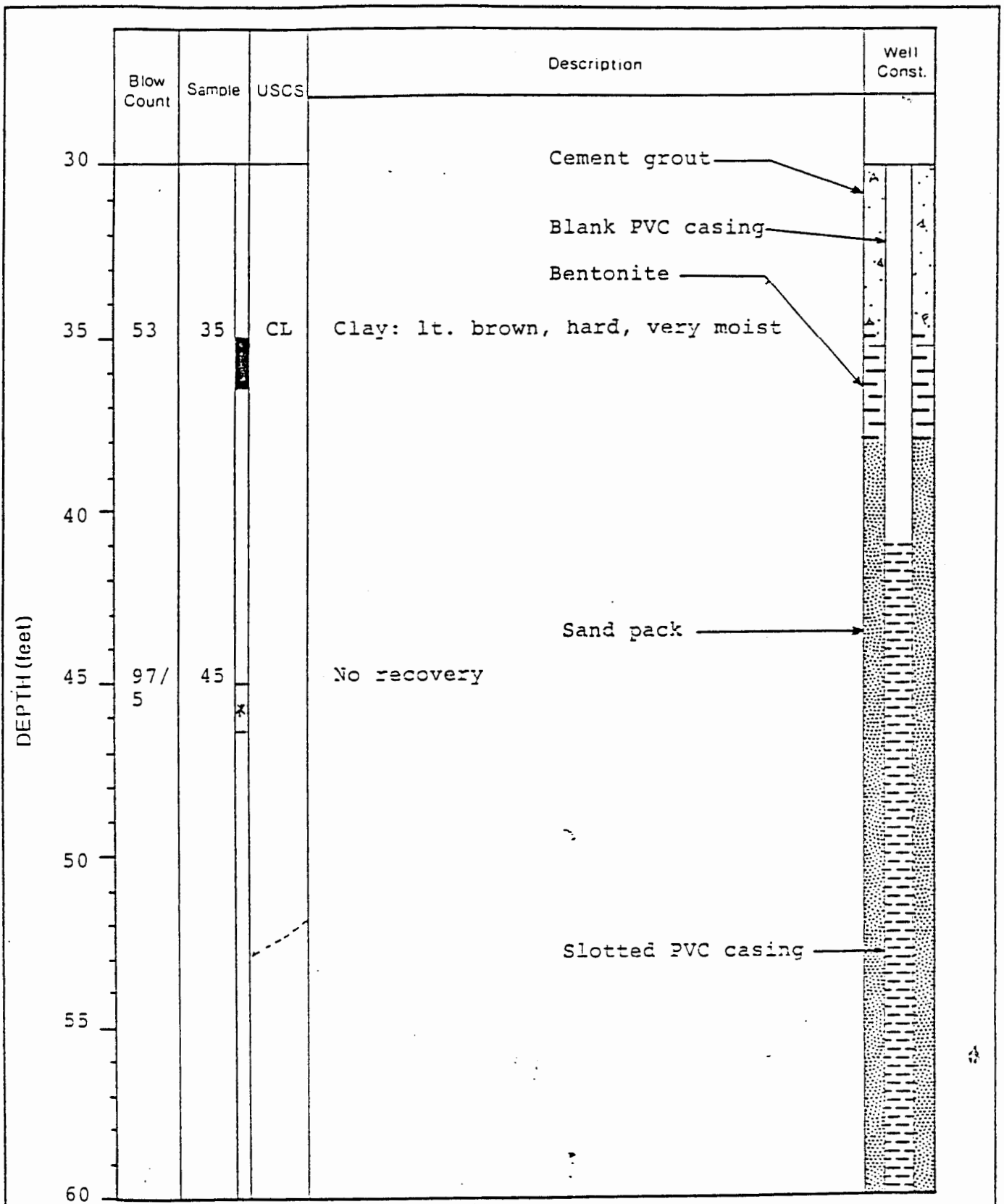
PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. 01014-2

PLATE

14



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Chemical Co.

SANTA FE SPRINGS, CALIFORNIA

LOG of BORING MW-8

PLATE

14

PREPARED BY:

DATE:

CHECKED BY:

DATE:

PROJECT NO. Q1014-2

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
	60				Slotted PVC casing
65				Sand pack	
70				Sand: fine to med., with coarse pebbles dense, tan, lt. brown	
75		75	SP	Bottom of hole	
				BORING TERMINATED AT 75' DATE OF DRILLING: JULY 12, 1985 DRILLING DONE BY: JEFF FRIEDMAN	

J.H. KLEINFELDER & ASSOCIATES GEOTECHNICAL CONSULTANTS • MATERIALS TESTING		So. Chemical Co. SANTA FE SPRINGS, CALIFORNIA	PLATE <div style="font-size: 2em; font-weight: bold;">14</div>
PREPARED BY: _____ DATE: _____		LOG of BORING MW-8	
CHECKED BY: _____ DATE: _____		PROJECT NO. Q1014-2	

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0				6" concrete Locking well cap PVC cap	
5	10	5	ML	Silt, silt with fine sand, black, soft, very moist	
10	30	10		No recovery Cement grout	
15	39	15	SP	Sand: fine sand with interbedded silt lens, tan-reddish, med. dense, moist	
20	68	20	SW	Sand: med. to coarse sand with pebbles up to $\frac{1}{2}$ ", tan, very dense, damp	
25	99/ 4	25	SW	Sand: coarse sand with ground, grey pebbles up to 1". V. dense, moist	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical Co.
SANTA FE SPRINGS, CALIFORNIA
LOG of BORING MW-9

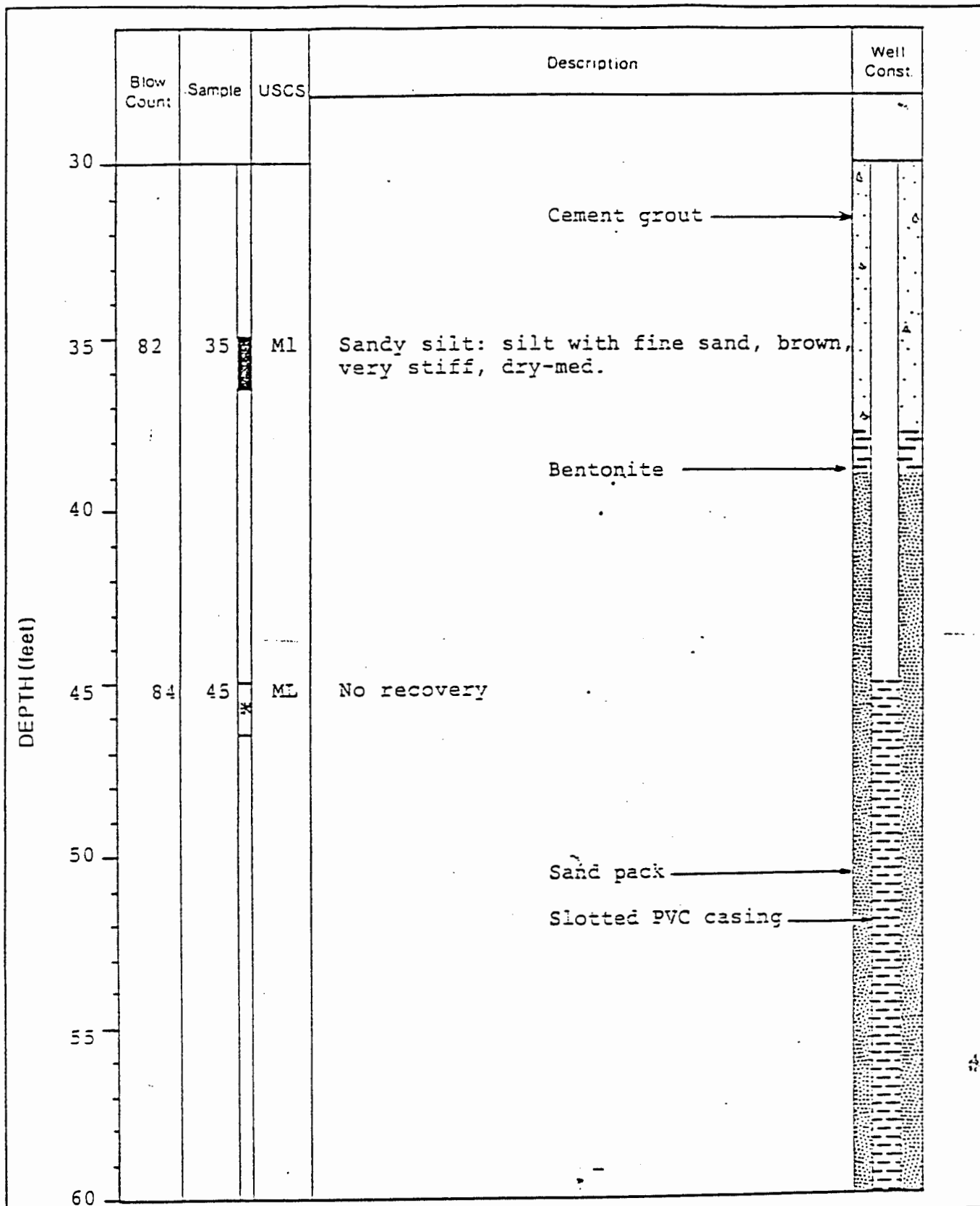
PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q1014-2

PLATE

15



J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical Co.
SANTA FE SPRINGS, CALIFORNIA

LOG of BORING MW-9

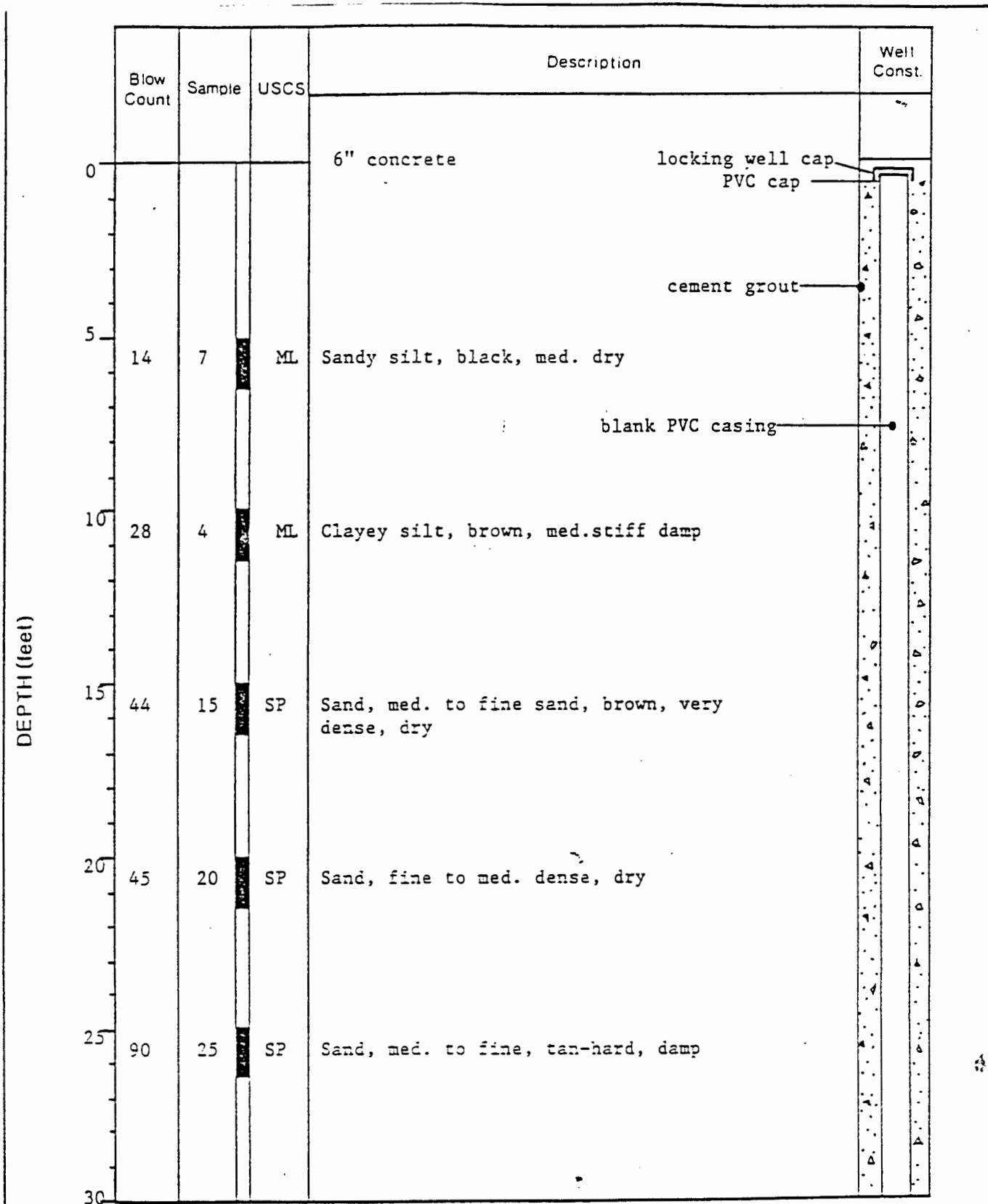
PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q1014-2

PLATE

15



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical

PLATE

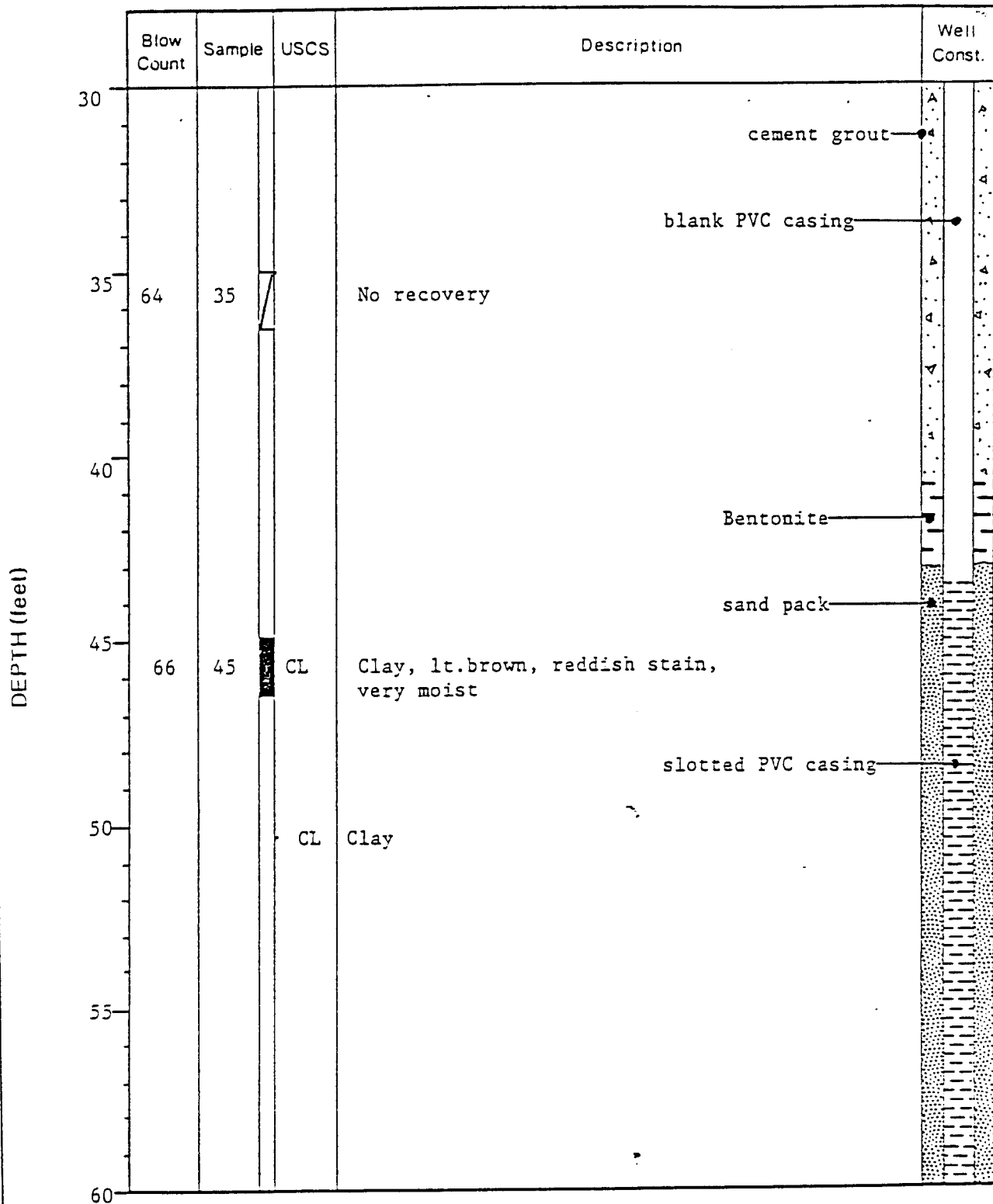
LOG of BORING MW-10

16

PREPARED BY: GH DATE: 7-85

CHECKED BY: DATE:

PROJECT NO. Q1014-2



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical

PLATE

LOG of BORING MW-10

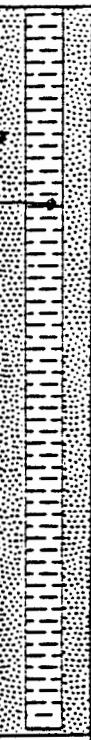
16

PREPARED BY: GH DATE: 7-85

CHECKED BY: DATE:

PROJECT NO. Q1014-2

DEPTH (feet)

Blow Count	Sample	USCS	Description	Well Const.
60		SP	Sand, fine	 <p>sand pack</p> <p>slotted PVC casing</p>
65				
70				
75				
80				
85				

Boring terminated at 75'
 Date of drilling was 4-10-85
 Materials logged by K. Durand

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



So. Cal. Chemical

LOG of BORING MW-10

PLATE

16

PREPARED BY: GH DATE: 7-85

CHECKED BY: DATE:

PROJECT NO. 01014-2

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
0				6" Concrete	
5	28	5	SC	Clayey sand, med. to fine with clay dark brown, dense, dry	
10	14	10	SM	Silty sand, med. to fine, with silt brown, loose, damp	
15	26	15	SP	Sand, fine, med., lt. brown, loose dry	
20	29	20	SP	Sand, coarse to med. tan-white med. dense, damp	
25	91	25	SP	Sand, med. to coarse sand with pebbles up to 3/8 " tan, very dense, damp	
30					

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



LOG of BORING MW-11

PLATE

17

PREPARED BY: GH DATE: 7-85

CHECKED BY: DATE:

PROJECT NO.

DEPTH (feet)

	Blow Count	Sample	USCS	Description	Well Const.
30					
35	64	35	ML	Sandy silt, silt with fine sand dark brown, very stiff, moist	
40					
45	49	45	ML CL	Silty clay, clayey silt, dense, very stiff, moist	
50					
55	41	55	CL	Clay, brown, saturated	
60					

J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



LOG of BORING MW-11

PLATE

17

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO.

DEPTH (feet)	Blow Count	Sample	USCS	Description	Well Const.
60					
65					
70					
75	90	75	SP	Sand interbedded fine & med. sand, tan-grey, very dense, saturated	
80				Boring Terminated at 76.5 feet Date of drilling was 7-8-85 Materials logged by J. Friedman	

J.H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



PREPARED BY: GH DATE: 7-85

CHECKED BY: DATE:

LOG of BORING MW-11

PROJECT NO. 0 11-1

PLATE

17

APPENDIX I

SOIL BORING LOCATION AND SOIL ANALYSIS DATA

TABULATION OF PHASE I WATER DATA

Groundwater indicator
Parameters

		MW1	MW2	MW3	MW4	MW5	MW6
pH	1st	7.3	7.0	7.3	6.3	7.3	7.6
	2nd	7.3	7.0	7.3	6.3	7.3	7.6
	3rd	7.3	7.0	7.3	6.3	7.3	7.6
	4th	7.3	7.2	7.5	6.3	7.3	7.0
	standard deviation	0.0	0.1	0.1	0.0	0.0	0.0
Average		7.3	7.0	7.4	6.3	7.3	7.6
Specific Conductance (Umhos/cm)	1st	2300	2400	1700	6400	1700	1400
	2nd	2300	2300	1700	6400	1700	1400
	3rd	2300	2300	1700	6400	1700	1400
	4th	2200	2300	1800	6400	1700	1400
	standard deviation	50	50	50	0	0	0
Average		2300	2300	1700	6400	1700	1400
TOC (mg/l)	1st	36	36	nd ₃	32	nd ₃	nd ₃
	2nd	46	29	nd ₃	38	nd ₃	nd ₃
	3rd	35	36	nd ₃	38	nd ₃	nd ₃
	4th	nd ₃	34	64	35	nd ₃	nd ₃
	standard deviation	0.7	3.3	32	2.9	0	0
Average		3.7	34	16	36	nd ₃	nd ₃
TOX (mg/l)	1st	nd 0.05	nd 0.05	0.18	nd 0.05	0.19	0.01
	2nd	nd 0.05	nd 0.05	0.17	nd 0.05	0.18	0.09
	3rd	nd 0.05	nd 0.05	0.16	nd 0.05	0.21	0.11
	4th	nd 0.05	nd 0.05	0.18	nd 0.05	0.19	0.11
	standard deviation	0	nd 0.01	0.01	0	0.013	0.01
Average		nd 0.05	nd 0.05	0.17	nd 0.05	0.19	0.10

TABULATION OF PHASE I WATER DATA

Parameters Establishing Groundwater Quality		(mg/l)					
		MW1	MW2	MW3	MW4	MW5	MW6
Chloride	500mg/l	330	270	170	2300	2.0	79
Iron	0.3mg/l	nd _{0.1}	0.32	nd _{0.1}	nd _{0.1}	nd _{0.1}	0.22
Manganese	0.05mg/l	0.73	7.5	0.67	3.7	nd _{0.05}	0.53
Phenols		nd _{0.05}	1.3	0.09	nd _{0.05}	0.52	nd _{0.1}
Sodium		100	96	55	180	1.4	85
Sulfate	500mg/l	240	300	220	150	310	690

Compounds Requested
by RWQCB & DOHS & SCC

		(mg/l)					
Sulfide		nd _{1.0}	nd _{1.0}	nd _{1.0}	nd _{1.0}	nd _{1.0}	nd _{0.1}
Hexavalent Chromium		nd _{0.05}	nd _{0.05}	nd _{0.05}	500	nd _{0.05}	nd _{0.05}
Nickel		0.0077	nd _{0.0040}	nd _{0.0040}	0.0053	nd _{0.0040}	nd _{0.0048}
Zinc	5.0mg/l	nd _{0.019}	nd _{0.019}	nd _{0.019}	0.06	nd _{0.019}	nd _{0.03}
Ammonia Nitrogen		0.15	0.33	0.36	0.10	0.11	0.25
Copper	1.0mg/l	nd _{0.08}	nd _{0.08}	nd _{0.08}	nd _{0.08}	nd _{0.08}	nd _{0.08}

Notes: * Secondary drinking water standard
 nd0.05 = not detected at level indicated
 (i.e. not detected at 0.05ppm)

TABULATION OF ORGANIC WATER DATA
(ug/l)

	MW 1		MW 2		MW 3		MW 4		MW 5		MW 6	
	B&C	RWQCB	B&C	RWQCB	B&C	RWQCB	B&C	RWQCB	B&C	RWQCB	B&C	RWQCB
1,1 Dichloroethane	Not Sampled		4	2.2	6	5	100	41	ND1	1.0	Not Sampled	
1,1 Dichloroethylene			3	1.7	14	2.2	100	52	ND1	1.1		
Benzene			ND1		9	1.4	ND50	3.7	5			
Carbon Tetrachloride			ND1		73	37	ND50		3	8.2		
Chloroform			ND1		46	29	ND50	24	2	6		
Ethylbenzene			ND1		ND1		3000	2100	ND1			0.
Methylene Chloride		34	ND1	1.1	ND1	1.5	100	93	ND1	6.2		24
Trichloroethylene		16	21	15	320	154	550	225	10	43		17
Toluene			ND1		2	8300	4500	1				1.
trans-1,2-Dichloroethylene			9	9.2	1	0.53	ND50	14	ND1			
Phenols		ND.001	ND1		ND1	0.015	ND50	.001	ND1	.005		ND.
Perchloroethylene		ND0.5	ND1		ND1	0.4	ND50		ND1	1.2		
1,2 Dichloroethane			ND1		ND1		ND50		ND1			
Semi-quantified Xylene			ND1		ND1		10000		ND1			
O-xylene						2000						1.
N-P-xylene						1100						0

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2	05 AUG 85			
08-064-2	W-00-264thru278 Q1014-2	05 AUG 85			
08-064-3	W-4A-249thru263 Q1014-2	05 AUG 85			
08-064-4	W-08-234thru248 Q1014-2	05 AUG 85			
PARAMETER	08-064-1	08-064-2	08-064-3	08-064-4	
Cadmium, mg/L	<0.01	<0.01	<0.01	<0.01	
Chromium, mg/L	<0.03	<0.03	<0.03	<0.03	
Dissolved Digestion, Date	08/06/85	08/06/85	08/06/85	08/06/85	
Hexavalent Chromium, mg/L	<0.5	<0.5	<0.5	<0.5	
Nitrate Nitrogen					
Nitrate (as NO3), mg/L	9.3	0.10	20	5.8	
Nitrate (as N), mg/L	2.1	0.44	4.5	1.3	
Quadruplicate pH:					
pH, Average, Units	5.6	4.2	6.8	6.6	
pH, Standard Deviation, Units	0.0	0.0	0.05	0.04	
pH, 1st Replicate, Units	5.6	4.2	6.8	6.6	
pH, 2nd Replicate, Units	5.6	4.2	6.8	6.6	
pH, 3rd Replicate, Units	5.6	4.2	6.7	6.7	
pH, 4th Replicate, Units	5.6	4.2	6.8	6.6	

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2	05 AUG 85			
08-064-2	W-00-264thru278 Q1014-2	05 AUG 85			
08-064-3	W-4A-249thru263 Q1014-2	05 AUG 85			
08-064-4	W-08-234thru248 Q1014-2	05 AUG 85			
PARAMETER		08-064-1	08-064-2	08-064-3	08-064-4
Quadruplicate Conductivity:					
Sp. Cond., Average, umhos/cm		52	190	1500	2800
Sp. Cond., Std. Deviation, umhos/cm		0	5	47	41
Sp. Cond., 1st Replicate, umhos/cm		52	190	1500	2800
Sp. Cond., 2nd Replicate, umhos/cm		52	180	1500	2800
Sp. Cond., 3rd Replicate, umhos/cm		52	180	1400	2800
Sp. Cond., 4th Replicate, umhos/cm		52	190	1500	2700
Quadruplicate TOC:					
TOC, Average, mg/L		<3	<3	40	99
TOC, Standard Deviation, mg/L		0	0	3.8	3.5
TOC, 1st Replicate, mg/L		<3	<3	38	99
TOC, 2nd Replicate, mg/L		<3	<3	37	96
TOC, 3rd Replicate, mg/L		<3	<3	46	103
TOC, 4th Replicate, mg/L		<3	<3	40	99

LOG NO: P85-08-064

Received: 05 AUG 85
Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2	05 AUG 85			
08-064-2	W-00-264thru278 Q1014-2	05 AUG 85			
8-064-3	W-4A-249thru263 Q1014-2	05 AUG 85			
8-064-4	W-08-234thru248 Q1014-2	05 AUG 85			
PARAMETER		08-064-1	08-064-2	08-064-3	08-064-4
Quadruplicate TOX:					
TOX, 1st Replicate, mg/L		<0.05	<0.05	<0.05	0.53
TOX, 2nd Replicate, mg/L		<0.05	0.052	<0.05	0.16
TOX, 3rd Replicate, mg/L		<0.05	<0.05	<0.05	0.27
TOX, 4th Replicate, mg/L		<0.05	<0.05	<0.05	0.79
TOX, Average, mg/L		<0.05	0.051	<0.05	0.44
TOX, Standard Deviation, mg/L		0.0	0.001	0.0	0.28

LOG NO: P85-08-064

Received: 05 AUG 85
Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Cadmium, mg/L	<0.01	
Chromium, mg/L	<0.03	
Dissolved Digestion, Date	08/06/85	
Hexavalent Chromium, mg/L	<0.5	
Nitrate Nitrogen		
Nitrate (as NO ₃), mg/L	<0.44	
Nitrate (as N), mg/L	<0.10	
Quadruplicate pH:		
pH, Average, Units	6.8	
pH, Standard Deviation, Units	0.04	
pH, 1st Replicate, Units	6.8	
pH, 2nd Replicate, Units	6.8	
pH, 3rd Replicate, Units	6.7	
pH, 4th Replicate, Units	6.8	
Quadruplicate Conductivity:		
Sp. Cond., Average, umhos/cm	2100	
Sp. Cond., Std. Deviation, umhos/cm	0	
Sp. Cond., 1st Replicate, umhos/cm	2100	
Sp. Cond., 2nd Replicate, umhos/cm	2100	
Sp. Cond., 3rd Replicate, umhos/cm	2100	
Sp. Cond., 4th Replicate, umhos/cm	2100	

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Quadruplicate TOC:		
TOC, Average, mg/L	440	
TOC, Standard Deviation, mg/L	6.6	
TOC, 1st Replicate, mg/L	430	
TOC, 2nd Replicate, mg/L	440	
TOC, 3rd Replicate, mg/L	440	
TOC, 4th Replicate, mg/L	450	
Quadruplicate TOX:		
TOX, 1st Replicate, mg/L	0.53	
TOX, 2nd Replicate, mg/L	0.11	
TOX, 3rd Replicate, mg/L	0.48	
TOX, 4th Replicate, mg/L	<0.05	
TOX, Average, mg/L	0.17	
TOX, Standard Deviation, mg/L	0.21	

LOG NO: P85-08-064

Received: 05 AUG 85
Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Purgeable Priority Pollutants		
Extraction	08/20/85	
Acrolein, ug/L	<500	
Acrylonitrile, ug/L	<500	
Chlorobenzene, ug/L	50	
Ethylbenzene, ug/L	6500	
Methylene Chloride, ug/L	100	
Trichloroethylene, ug/L	250	
Toluene, ug/L	17,000	
Other Purgeable Priority Pollutants,	<50	
Semi-Quantified Results **		
Xylene Isomers, ug/L	20,000	

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

RECEIVED

SEP 06 1985

JNA & A LA

LOG NO: P85-08-042

Received: 02 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-042-1	W-00-155thrul58 Q-1014-2	02 AUG 85
PARAMETER	08-042-1	
Quadruplicate TOC:		
TOC, Average, mg/L	<3.0	
TOC, Standard Deviation, mg/L	0.0	
TOC, 1st Replicate, mg/L	<3.0	
TOC, 2nd Replicate, mg/L	<3.0	
TOC, 3rd Replicate, mg/L	<3.0	
TOC, 4th Replicate, mg/L	<3.0	

LOG NO: P85-08-042

Received: 02 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED		
08-042-2	W-07-159thru173 Q-1014-2	02 AUG 85		
08-042-3	W-09-189thru203 Q-1014-2	02 AUG 85		
08-042-4	W-11-174thru188 Q-1014-2	02 AUG 85		
PARAMETER	08-042-2	08-042-3	08-042-4	
Cadmium, mg/L	<0.01	<0.01	<0.01	
Chromium, mg/L	<0.03	<0.03	<0.03	
Dissolved Digestion, Date	08/06/85	08/06/85	08/06/85	
Chloride, mg/L	380	300	220	
hexavalent Chromium, mg/L	<0.5	<0.5	<0.5	
Nitrate Nitrogen				
Nitrate (as NO3), mg/L	120	6.3	5.2	
Nitrate (as N), mg/L	27	1.4	1.2	
Quadruplicate Conductivity:				
Sp. Cond., Average, umhos/cm	2700	2200	1600	
Sp. Cond., Std. Deviation, umhos/cm	43	0	43	
Sp. Cond., 1st Replicate, umhos/cm	2700	2200	1600	
Sp. Cond., 2nd Replicate, umhos/cm	2700	2200	1700	
Sp. Cond., 3rd Replicate, umhos/cm	2800	2200	1600	
Sp. Cond., 4th Replicate, umhos/cm	2700	2200	1600	

LOG NO: P85-08-042

Received: 02 AUG 85
Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED		
08-042-2	W-07-159thru173 Q-1014-2	02 AUG 85		
08-042-3	W-09-189thru203 Q-1014-2	02 AUG 85		
08-042-4	W-11-174thru188 Q-1014-2	02 AUG 85		
PARAMETER		08-042-2	08-042-3	08-042-4
Triplicate pH:				
pH, Average, Units		6.3	6.4	6.6
pH, Standard Deviation, Units		0.04	0.0	0.04
pH, 1st Replicate, Units		6.4	6.4	6.6
pH, 2nd Replicate, Units		6.3	6.4	6.7
pH, 3rd Replicate, Units		6.3	6.4	6.6
pH, 4th Replicate, Units		6.3	6.4	6.6
Quadruplicate TOC:				
TOC, Average, mg/L		260	210	54
TOC, Standard Deviation, mg/L		21	0.0	1.7
TOC, 1st Replicate, mg/L		270	210	56
TOC, 2nd Replicate, mg/L		280	210	52
TOC, 3rd Replicate, mg/L		240	210	53
TOC, 4th Replicate, mg/L		240	210	54

LOG NO: P85-08-042

Received: 02 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED		
08-042-2	W-07-159thru173 Q-1014-2	02 AUG 85		
08-042-3	W-09-189thru203 Q-1014-2	02 AUG 85		
08-042-4	W-11-174thru188 Q-1014-2	02 AUG 85		
PARAMETER		08-042-2	08-042-3	08-042-4
Duplicate TOX:				
TOX, 1st Replicate, mg/L		0.069	0.11	<0.05
TOX, 2nd Replicate, mg/L		0.10	0.12	<0.05
TOX, 3rd Replicate, mg/L		0.091	0.13	<0.05
TOX, 4th Replicate, mg/L		0.063	0.15	0.098
TOX, Average, mg/L		0.081	0.13	0.062
TOX, Standard Deviation, mg/L		0.018	0.017	0.024

Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

RECEIVED

AUG 13 1985

LA

LOG NO: P85-07-363

Received: 24 JUL 85

Reported: 10 AUG 85

Ken Durand
J.H. Kleinfelder & Assoc.
901 W. Victoria St., Suite G
Compton, CA 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES						DATE SAMPLED
7-363-1	W-00-137/W-00-138 Q-1014-2						24 JUL 85
7-363-2	W-02-140 Q-1014-2						24 JUL 85
07-363-3	W-05-144/W-05-145 Q-1014-2						24 JUL 85
7-363-4	W-04-146/W-04-147 Q-1014-2						24 JUL 85
7-363-5	W-00-149/W-00-150 Q-1014-2						24 JUL 85
07-363-6	W-03-152/W-03-153 Q-1014-2						24 JUL 85
AMETER	07-363-1	07-363-2	07-363-3	07-363-4	07-363-5	07-363-6	
Purgeable Priority Pollutants							
Extraction	08/07/85	08/07/85	08/07/85	08/07/85	08/07/85	08/07/85	
1,1-Dichloroethane, ug/L	<1	4	<1	100	<1	6	
1,1-Dichloroethylene, ug/L	<1	3	<1	100	<1	14	
Acrolein, ug/L	<10	<10	<10	<500	<10	<10	
Acrylonitrile, ug/L	<10	<10	<10	<500	<10	<10	
Benzene, ug/L	16	<1	5	<50	14	9	
Carbon Tetrachloride, ug/L	<1	<1	3	<50	<1	73	
Chloroform, ug/L	<1	<1	2	<50	<1	46	
Ethylbenzene, ug/L	<1	<1	<1	3000	<1	<1	
Methylene Chloride, ug/L	<1	<1	<1	100	16	<1	
Trichloroethylene, ug/L	<1	21	10	550	<1	320	
Toluene, ug/L	14	<1	1	8300	13	2	
trans-1,2-Dichloroethylene, ug/L	<1	9	<1	<50	<1	1	
Other Purgeable Priority Pollutants,	<1	<1	<1	<50	<1	<1	

LOG NO: P85-07-363

Received: 24 JUL 85

Reported: 10 AUG 85

Ken Durand
J.H. Kleinfelder & Assoc.
901 W. Victoria St., Suite G
Compton, CA 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-363-1	W-00-137/W-00-138 Q-1014-2	24 JUL 85
07-363-2	W-02-140 Q-1014-2	24 JUL 85
07-363-3	W-05-144/W-05-145 Q-1014-2	24 JUL 85
07-363-4	W-04-146/W-04-147 Q-1014-2	24 JUL 85
07-363-5	W-00-149/W-00-150 Q-1014-2	24 JUL 85
07-363-6	W-03-152/W-03-153 Q-1014-2	24 JUL 85
PARAMETER	07-363-1 07-363-2 07-363-3 07-363-4 07-363-5 07-363-6	

Semi-Quantified Results **

Xylene Isomers, ug/L	---	---	---	10,000	---	---
----------------------	-----	-----	-----	--------	-----	-----

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.

LOG NO: P85-07-363

Received: 24 JUL 85

Reported: 10 AUG 85

Ken Durand
J.H. Kleinfelder & Assoc.
901 W. Victoria St., Suite G
Compton, CA 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-363-7	W-02-142 Q-1014-2	24 JUL 85
PARAMETER	07-363-7	
Chromium, mg/L	<0.033	
Dissolved Digestion, Date	07/25/85	
Hexavalent Chromium, mg/L	<0.033	

LOG NO: P85-07-363

Received: 24 JUL 85

Reported: 10 AUG 85

Ken Durand
J.H. Kleinfelder & Assoc.
901 W. Victoria St., Suite G
Compton, CA 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-363-8	W-04-148 Q-1014-2	24 JUL 85
PARAMETER	07-363-8	
Chromium, mg/L	550	
Cadmium, mg/L	0.92	
Dissolved Digestion, Date	07/25/85	
Hexavalent Chromium, mg/L	500	
Nitrate Nitrogen		
Nitrate (as NO ₃), mg/L	55	
Nitrate (as N), mg/L	12	

LOG NO: P85-07-363

Received: 24 JUL 85


Reported: 10 AUG 85

Ken Durand
J.H. Kleinfelder & Assoc.
901 W. Victoria St., Suite G
Compton, CA 90220

Project: Q-1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
07-363-9	W-03-154 Q-1014-2	24 JUL 85
PARAMETER	07-363-9	
Cadmium, mg/L	<0.011	
Chromium, mg/L	<0.033	
Dissolved Digestion, Date	07/25/85	
Hexavalent Chromium, mg/L	<0.033	


Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

RECEIVED

SEP 05 1985

JHK & A LA

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G.
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2	05 AUG 85			
08-064-2	W-00-264thru278 Q1014-2	05 AUG 85			
08-064-3	W-4A-249thru263 Q1014-2	05 AUG 85			
08-064-4	W-08-234thru248 Q1014-2	05 AUG 85			
PARAMETER		08-064-1	08-064-2	08-064-3	08-064-4
Cadmium, mg/L		<0.01	<0.01	<0.01	<0.01
Chromium, mg/L		<0.03	<0.03	<0.03	<0.03
Insoluble Digestion, Date		08/06/85	08/06/85	08/06/85	08/06/85
Hexavalent Chromium, mg/L		<0.5	<0.5	<0.5	<0.5
Nitrate Nitrogen					
Nitrate (as NO3), mg/L		9.3	0.10	20	5.8
Nitrate (as N), mg/L		2.1	0.44	4.5	1.3
Quadruplicate pH:					
pH, Average, Units		5.6	4.2	6.8	6.6
pH, Standard Deviation, Units		0.0	0.0	0.05	0.04
pH, 1st Replicate, Units		5.6	4.2	6.8	6.6
pH, 2nd Replicate, Units		5.6	4.2	6.8	6.6
pH, 3rd Replicate, Units		5.6	4.2	6.7	6.7
pH, 4th Replicate, Units		5.6	4.2	6.8	6.6

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2	05 AUG 85			
08-064-2	W-00-264thru278 Q1014-2	05 AUG 85			
08-064-3	W-4A-249thru263 Q1014-2	05 AUG 85			
08-064-4	W-08-234thru248 Q1014-2	05 AUG 85			
PARAMETER		08-064-1	08-064-2	08-064-3	08-064-4
Quadruplicate Conductivity:					
Sp. Cond., Average, umhos/cm		52	190	1500	2800
Sp. Cond., Std. Deviation, umhos/cm		0	5	47	43
Sp. Cond., 1st Replicate, umhos/cm		52	190	1500	2800
Sp. Cond., 2nd Replicate, umhos/cm		52	180	1500	2800
Sp. Cond., 3rd Replicate, umhos/cm		52	180	1400	2800
Sp. Cond., 4th Replicate, umhos/cm		52	190	1500	2700
Quadruplicate TOC:					
TOC, Average, mg/L		<3	<3	40	99
TOC, Standard Deviation, mg/L		0	0	3.8	3.5
TOC, 1st Replicate, mg/L		<3	<3	38	99
TOC, 2nd Replicate, mg/L		<3	<3	37	96
TOC, 3rd Replicate, mg/L		<3	<3	46	103
TOC, 4th Replicate, mg/L		<3	<3	40	99

LOG NO: P85-08-064

Received: 05 AUG 85
Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED			
08-064-1	W-00-204thru218 Q1014-2				05 AUG 85
08-064-2	W-00-264thru278 Q1014-2				05 AUG 85
08-064-3	W-4A-249thru263 Q1014-2				05 AUG 85
08-064-4	W-08-234thru248 Q1014-2				05 AUG 85
PARAMETER		08-064-1	08-064-2	08-064-3	08-064-4
Quadruplicate TOX:					
TOX, 1st Replicate, mg/L		<0.05	<0.05	<0.05	0.53
TOX, 2nd Replicate, mg/L		<0.05	0.052	<0.05	0.16
TOX, 3rd Replicate, mg/L		<0.05	<0.05	<0.05	0.27
TOX, 4th Replicate, mg/L		<0.05	<0.05	<0.05	0.79
TOX, Average, mg/L		<0.05	0.051	<0.05	0.44
TOX, Standard Deviation, mg/L		0.0	0.001	0.0	0.28

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Cadmium, mg/L	<0.01	
Chromium, mg/L	<0.03	
Solvent Digestion, Date	08/06/85	
Hexavalent Chromium, mg/L	<0.5	
Nitrate Nitrogen		
Nitrate (as NO3), mg/L	<0.44	
Nitrate (as N), mg/L	<0.10	
Quadruplicate pH:		
pH, Average, Units	6.8	
pH, Standard Deviation, Units	0.04	
pH, 1st Replicate, Units	6.8	
pH, 2nd Replicate, Units	6.8	
pH, 3rd Replicate, Units	6.7	
pH, 4th Replicate, Units	6.8	
Quadruplicate Conductivity:		
Sp. Cond., Average, umhos/cm	2100	
Sp. Cond., Std. Deviation, umhos/cm	0	
Sp. Cond., 1st Replicate, umhos/cm	2100	
Sp. Cond., 2nd Replicate, umhos/cm	2100	
Sp. Cond., 3rd Replicate, umhos/cm	2100	
Sp. Cond., 4th Replicate, umhos/cm	2100	

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G.
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Quadruplicate TOC:		
TOC, Average, mg/L	440	
TOC, Standard Deviation, mg/L	6.6	
TOC, 1st Replicate, mg/L	430	
TOC, 2nd Replicate, mg/L	440	
TOC, 3rd Replicate, mg/L	440	
TOC, 4th Replicate, mg/L	450	
Quadruplicate TOX:		
TOX, 1st Replicate, mg/L	0.53	
TOX, 2nd Replicate, mg/L	0.11	
TOX, 3rd Replicate, mg/L	0.48	
TOX, 4th Replicate, mg/L	<0.05	
TOX, Average, mg/L	0.17	
TOX, Standard Deviation, mg/L	0.21	

LOG NO: P85-08-064

Received: 05 AUG 85

Reported: 03 SEP 85

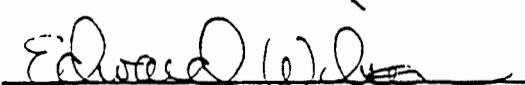
Ken Durand
J. H. Kleinfelder & Associates
901 W. Victoria Street, Suite G.
Compton, California 90220

Project: Q1014-2

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, AQUEOUS SAMPLES	DATE SAMPLED
08-064-5	W-10-219thru233 Q1014-2	05 AUG 85
PARAMETER	08-064-5	
Purgeable Priority Pollutants		
Extraction	08/20/85	
olein, ug/L	<500	
Acrylonitrile, ug/L	<500	
Chlorobenzene, ug/L	50	
Ethylbenzene, ug/L	6500	
Methylene Chloride, ug/L	100	
Trichloroethylene, ug/L	250	
Toluene, ug/L	17,000	
Other Purgeable Priority Pollutants,	<50	
Semi-Quantified Results **		
Xylene Isomers, ug/L	20,000	

** Quantification based upon comparison of total ion count of the compound with that of the nearest internal standard.


Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

LOG NO: P85-03-126

Received: 06 MAR 85

Reported: 13 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLE	
03-126-1	Well #2	06 MAR 85	
03-126-2	Well #3	06 MAR 85	
PARAMETER	03-126-1	03-126-2	
Arsenic, mg/L	0.005	0.003	
Barium, mg/L	<0.34	<0.34	
Cadmium, mg/L	<0.0002	<0.0002	
Chromium, mg/L	<0.0005	<0.0005	
Fluoride, mg/L	0.43	0.34	
Lead, mg/L	<0.0046	<0.0046	
Mercury, mg/L	<0.001	<0.001	
Nitrate Nitrogen			
Nitrate Nitrogen, mg/L	9.1	13	
Nitrate (as N), mg/L	2.1	3.0	
Selenium, mg/L	<0.007	<0.007	
Silver, mg/L	<0.00023	<0.00023	

LOG NO: P85-03-12

Received: 06 MAR 8

Reported: 13 APR 8

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLE	
03-126-1	Well #2	06 MAR 8	
03-126-2	Well #3	06 MAR 8	
PARAMETER	03-126-1	03-126-2	
Title 22 Organics in Water			
Date Extracted	03/25/85	03/25/85	
Date Analyzed	03/29/85	03/29/85	
2,4,5-TP (SILVEX), ug/L	<0.5	<0.5	
2,4-D, ug/L	<2.5	<2.5	
Endrin, ug/L	<0.1	<0.1	
Lindane, ug/L	<0.05	<0.05	
Methoxychlor, ug/L	<0.3	<0.3	
Toxaphene, ug/L	<1	<1	
Radioactivity			
Gross Alpha, pCi/L	4.2 \pm 2.8	4.6 \pm 2.8	
Gross Beta, pCi/L	-16 \pm 21	-4.1 \pm 21	
Chloride, mg/L	270	170	
Iron, mg/L	0.32	<0.1	
Manganese, mg/L	7.5	0.67	
Phenolics, mg/L	1.3	0.09	
Sodium, mg/L	96	55	
Sulfate, mg/L	300	220	

Received: 06 MAR 85
Reported: 13 APR 85

Purchase Order: Q1014-I

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-126-1	Well #2	06 MAR 85	
03-126-2	Well #3	06 MAR 85	
PARAMETER	03-126-1	03-126-2	
Quadruplicate pH:			
pH, Average, mg/L	7.0	7.4	
pH, Standard Deviation, mg/L	0.1	0.1	
pH, 2nd Replicate, mg/L	7.0	7.3	
pH, 3rd Replicate, mg/L	7.0	7.3	
pH, 4th Replicate, mg/L	7.2	7.5	
pH, mg/L	7.0	7.3	
Quadruplicate Conductivity:			
Sp. Cond., Average, umhos/cm	2300	1700	
Sp. Cond., Std. Deviation, umhos/cm	50	50	
Sp. Cond., 1st Replicate, umhos/cm	2400	1700	
Sp. Cond., 2nd Replicate, umhos/cm	2300	1700	
Sp. Cond., 3rd Replicate, umhos/cm	2300	1700	
Sp. Cond., 4th Replicate, umhos/cm	2300	1800	

EXPLANATION



WATER MONITORING WELL

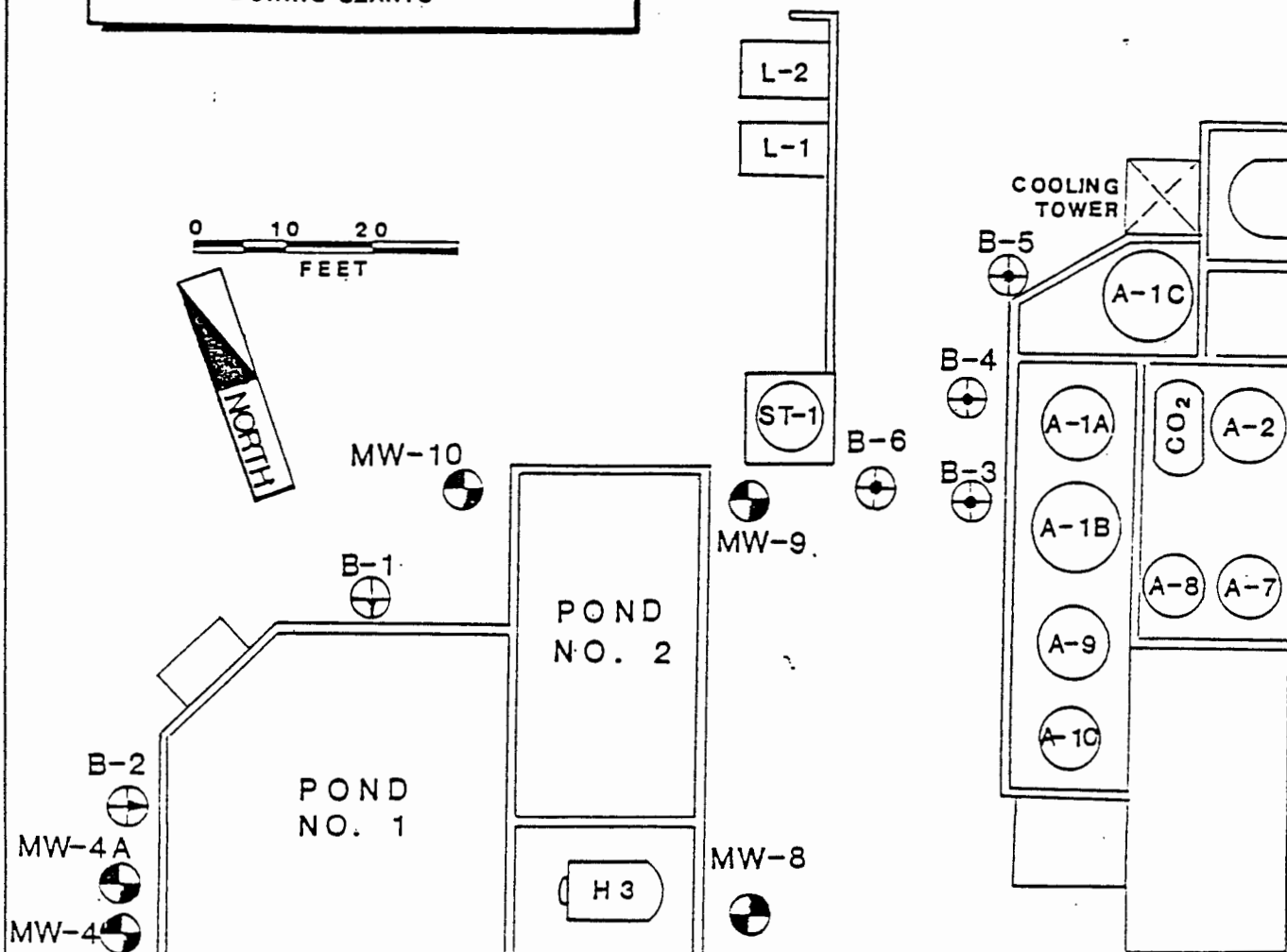


EXPLORATORY BORING



EXPLORATORY BORING
ARROW INDICATES DIRECTION
BORING SLANTS

0 10 20
FEET



I. H. KLEINFELDER & ASSOCIATES
GEOTECHNICAL CONSULTANTS • MATERIALS TESTING



SOUTHERN CALIFORNIA CHEMICAL
SANTA FE SPRINGS, CA.

BORING/WELL LOCATIONS

PLATE

3

PREPARED BY: DATE:

CHECKED BY: DATE:

PROJECT NO. Q 1014-2

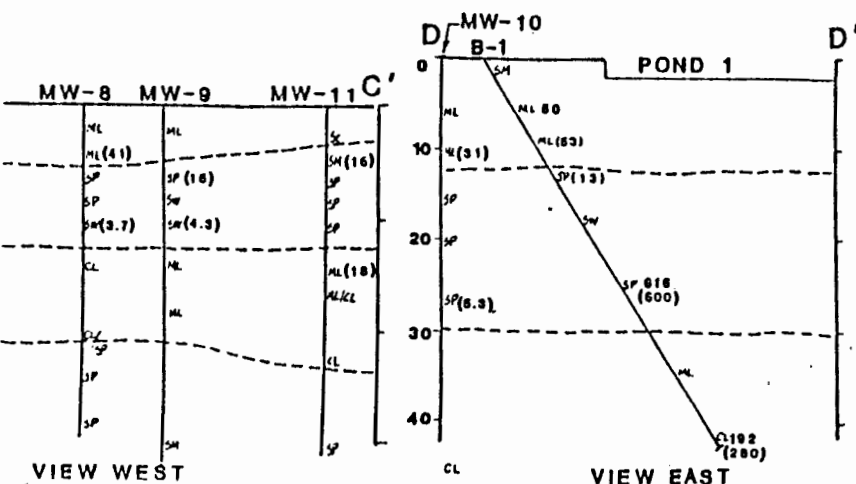
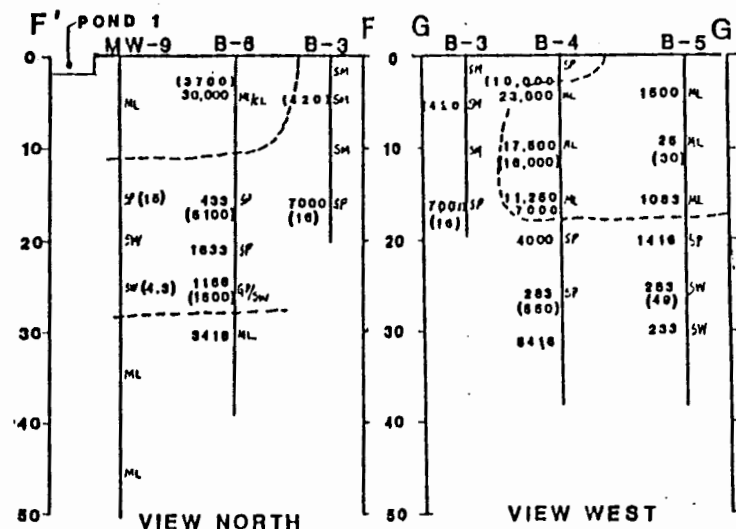
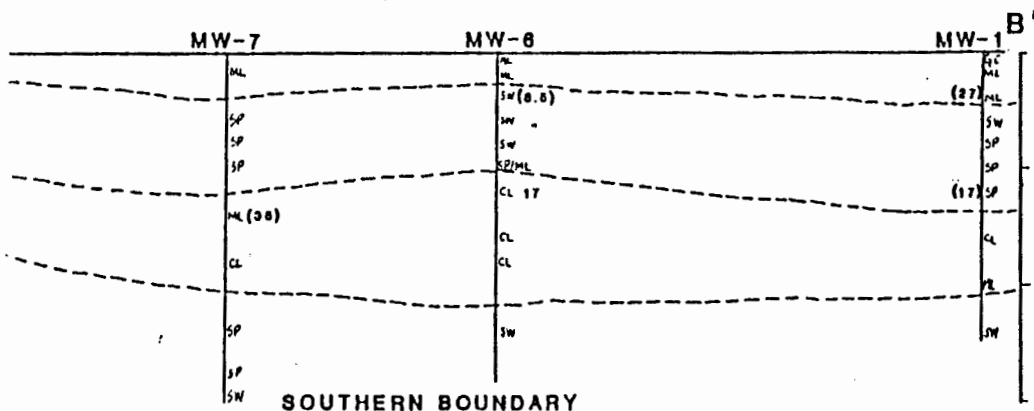
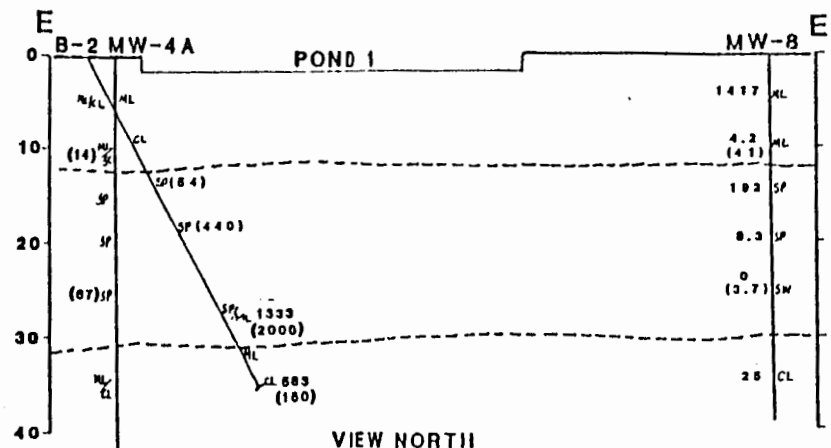
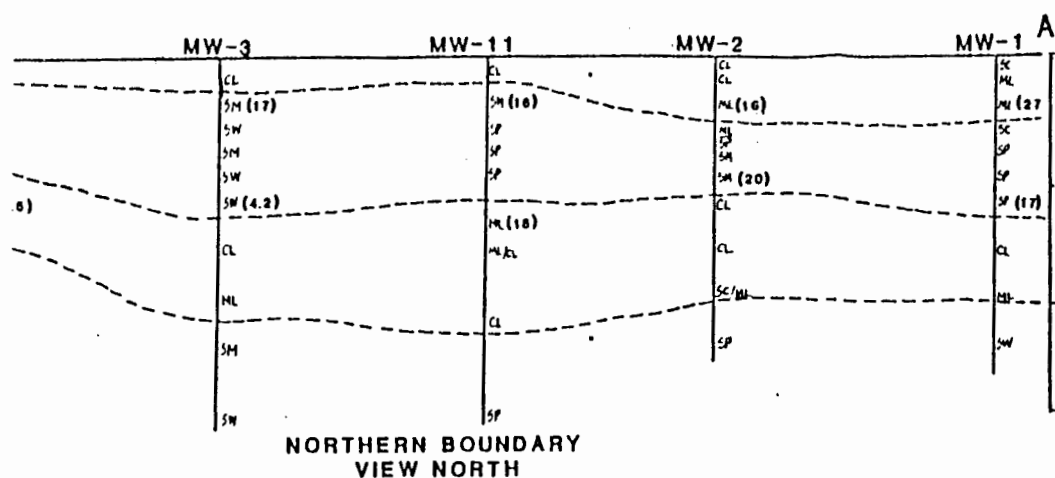
TABULATION OF SOIL DATA

(mg/kg)

<u>Boring #</u>	<u>Depth</u>	<u>pH</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Copper</u>	<u>Zinc</u>	<u>Nickel</u>	<u>Chloride</u>	<u>Sulfate</u>	<u>Ammonia Nitrogen</u>	<u>Carbonate</u>
B1	10	8.0	--	53	470	--	--	--	--	--	--
	15	7.0	--	13	130	--	--	--	--	--	--
	40	3.9	1.5	600	400	180	--	5100	20	29	ND
	50	5.5	8.0	280	160	95	--	2600	71	10	ND
12	15	3.9	--	54	390	--	--	--	--	--	--
	20	3.9	--	440	230	--	--	--	--	--	--
	35	3.3	1.2	2000	250	120	--	5500	41	42	ND
	40	3.3	1.4	150	550	170	--	2900	45	11	ND
3	5	8.1	--	420	1200	--	--	--	--	--	--
	15	6.3	ND 0.67	11	31	57	--	1100	110	23	ND
1	5	4.6	--	10000	480	--	--	--	--	--	--
	10	4.0	ND 0.62	16000	820	92	--	--	--	--	--
	25	4.2	ND 0.61	550	1200	52	--	1400	450	25	ND
	5	8.7	--	85	230	--	--	--	--	--	--
	10	8.3	--	30	78	79	26	--	--	--	--
	15	4.8	--	3200	12000	--	--	1600	170	21	ND
	25	4.5	--	49	160	34	12	--	--	--	--
	5	4.5	--	3700	460	--	--	--	--	--	--
	15	3.6	--	5100	4100	430	240	1800	2000	500	ND
	25	4.2	--	1500	1400	43	98	--	--	--	--

tes = Depth is in feet

ND 0.67 = Not Detected at 0.67 mg/kg (ppm)



SCALE VARIES
DEPTHS MEASURED IN FEET BELOW GROUND SURFACE

TEST RESULTS FROM
SOUTHERN CALIFORNIA CHEMICAL
BROWN & CALDWELL



J. H. KLEINFELDER & ASSOCIATES

GEOTECHNICAL CONSULTANTS — ENGINEERING LABORATORIES

DRAWN BY: HAP

DATE: 9/85

CHECKED BY: KD

DATE: 9/85

SOUTHERN CALIFORNIA CHEMICAL
SANTA FE SPRINGS, CA.

CROSS SECTIONS
WITH CONCENTRATIONS OF
CHROMIUM IN SOIL (MG/KG)

PROJECT NO. Q1014-2

PLATE

29

Tabulation of Soil Data
(mg/kg)

Monitoring											Ammonia
Well #	Depth	Cadmium	pH	Carbonate	Chromium	Copper	Zinc	Nickel	Chloride	Sulfate	Nitrogen
MW1	10				27	63	85	29			
	30				17	36	62	16			
MW2	10				16	36	57	21			
	30				21	170	860	77			
MW3	10				17	44	59	18			
	30				4.2	19	20	ND5			
MW4	10				16	37	52	21			
	30				19	50	72	25			
MW4A	10		4.9		14	410	110	31			
	25		6.2	ND	67	24	150	9.7	2,700	79	29
MW5	10				5.9	36	38	6.6			
	30				5.5	17	22	5.1			
MW6A	10				8.5	43	43	12			
MW6B	30				17	62	89	21			
MW7	35	ND0.59	6.9		35	46	77				
MW8	10		7.3		41	61	96	27			
	25		8.5		37	94	54	ND3.1	510	50	10
MW9	15		6.9	ND	15	28	55	19	4,800	67	8.4
	25		7.4		4.3	18	29	4.6			
MW10	10		8.3		31	89	100	28			
	25		7.3	ND	5.3	25	30	6.4	470	67	66
MW11	10	1.2	4.9		16	2,400	120				
	35	3.0	8.2		18	40	68				

NOTES: Depth is in feet

ND 0.59 = Not Detected at 0.59 mg/kg (ppm)

APPENDIX J

FIRST YEAR (1985) RCRA GROUND WATER DETECTION MONITORING DATA
(SPLIT SAMPLING)

EPA Primary Drink Water Standards	Max TABULATION OF PHASE I WATER DATA (mg/l)						
	Level (mg/l)	MW1	MW2	MW3	MW4	MW5	MW6
Arsenic	0.05	nd 0.0031	0.005	0.003	nd 0.0031	nd 0.003	nd 0.0026
Barium	1.0	nd 0.34	nd 0.34	nd 0.34	nd 0.34	nd 0.34	nd 0.3
Cadmium	0.01	nd 0.0002	nd 0.0002	nd 0.0002	0.78	nd 0.0002	nd 0.0002
Chromium	0.05	nd 0.0005	nd 0.0005	nd 0.0005	500	nd 0.0005	nd 0.0038
Fluoride	1.4-2.4	0.30	0.43	0.34	0.26	nd 0.10	0.34
Lead	0.05	nd 0.0046	nd 0.0046	nd 0.0046	nd 0.0046	nd 0.006	nd 0.0050
Mercury	0.002	nd 0.001	nd 0.001	nd 0.001	nd 0.002	nd 0.001	nd 0.001
Nitrate (NO ₃)	45	31	9.1	13	81	1.9	28
(N)	10	7.0	2.1	3.0	19	0.42	6.3
Selenium	0.01	0.0056	nd 0.007	nd 0.007	nd 0.0041	nd 0.007	0.010
Silver	0.05	nd 0.00023	nd 0.00023	nd 0.00023	nd 0.00023	nd 0.00023	nd 0.06
Endrin	0.0002	nd 0.0001	nd 0.0001	nd 0.0001	nd 0.0001	nd 0.0001	0.0001
Lindane	0.004	nd 0.00005	nd 0.00005	nd 0.00005	nd 0.00005	nd 0.00005	0.00005
Methoxychlor	0.1	nd 0.0003	nd 0.0003	nd 0.0003	nd 0.0003	nd 0.0003	0.0003
Toxaphene	0.005	nd 0.001	nd 0.001	nd 0.001	nd 0.001	nd 0.001	0.001
2,4D	0.1	nd 0.0025	nd 0.0025	nd 0.0025	nd 0.0025	nd 0.0025	nd 0.0005
2,4,5-TP Silver	0.01	nd 0.0005	nd 0.0005	nd 0.0005	nd 0.0005	nd 0.0005	0.0001
Gross Alpha	15pCi/l	2.4±3.3	4.2±2.8	4.6±2.8	1.7 ± 6.2	4.6±2.4	5.4±2.0

LOG NO: P85-03-126

Received: 06 MAR 85

Reported: 13 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-126-1	Well #2	06 MAR 85	
03-126-2	Well #3	06 MAR 85	
PARAMETER	03-126-1	03-126-2	
Quadruplicate TOC:			
TOC, Average, mg/L	34	16	
TOC, Standard Deviation, mg/L	3.3	32	
TOC, 1st Replicate, mg/L	36	<3	
TOC, 2nd Replicate, mg/L	29	<3	
TOC, 3rd Replicate, mg/L	36	<3	
TOC, 4th Replicate, mg/L	34	64	
Quadruplicate TOX:			
Total Organic Halides (TOX), ug/L	<0.05	0.18	
TOX, 2nd Replicate, ug/L	<0.05	0.17	
TOX, 3rd Replicate, ug/L	<0.05	0.16	
TOX, 4th Replicate, ug/L	<0.05	0.18	
TOX, Average, ug/L	<0.05	0.17	
TOX, Standard Deviation, ug/L	<0.01	0.01	
Ammonia Nitrogen, mg/L	0.33	0.36	
Sulfide, mg/L	<1.0	<1.0	
Hexavalent Chromium, mg/L	<0.05	<0.05	
Nickel, mg/L	<0.0040	<0.0040	
Zinc, mg/L	<0.019	<0.019	
Nitric Acid Digestion, Date	03/12/85	03/12/85	

LOG NO: P85-03-126

Received: 06 MAR 85

Reported: 13 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-126-1	Well #2	06 MAR 85	
03-126-2	Well #3	06 MAR 85	
PARAMETER		03-126-1	03-126-2
Copper, mg/L		<0.08	<0.08

Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

RECEIVED

APR 03 1985

LOG NO: P85-02-310

Received: 26 FEB 85

Reported: 01 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014

Requisition: WELL #5

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
02-310-1	Well #5 Q1014	22 FEB 85
PARAMETER	02-310-1	
Arsenic, mg/L	<0.003	
Barium, mg/L	<0.33	
Cadmium, mg/L	<0.0002	
Chromium, mg/L	<0.0005	
Fluoride, mg/L	<0.10	
Lead, mg/L	<0.006	
Mercury, mg/L	<0.001	
Nitrate Nitrogen		
Nitrate Nitrogen, mg/L	1.9	
Nitrate (as N), mg/L	0.42	
Selenium, mg/L	<0.007	
Silver, mg/L	<0.00023	
Title 22 Organics in Water		
Date Extracted	03/18/85	
Date Analyzed	03/25/85	
2,4,5-TP (SILVEX), ug/L	<0.5	
2,4-D, ug/L	<2.5	
Endrin, ug/L	<0.1	
Lindane, ug/L	<0.05	
Methoxychlor, ug/L	<0.3	
Toxaphene, ug/L	<1	

RECEIVED

APR 03 1985

LOG NO: P85-02-310

Received: 26 FEB 85

Reported: 01 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014

Requisition: WELL #5

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
02-310-1	Well #5 Q1014	22 FEB 85
PARAMETER	02-310-1	
Radioactivity		
Gross Alpha, pCi/L	4.6 \pm 2.4	
Gross Beta, pCi/L	-6.9 \pm 8.9	
Fluoride, mg/L	2.0	
Iron, mg/L	<0.1	
Manganese, mg/L	<0.05	
Phenolics, mg/L	0.52	
Sodium, mg/L	1.4	
Sulfate, mg/L	310	
Quadruplicate pH:		
pH, Average, mg/L	7.3	
pH, Standard Deviation, mg/L	0.0	
pH, 2nd Replicate, mg/L	7.3	
pH, 3rd Replicate, mg/L	7.3	
pH, 4th Replicate, mg/L	7.3	
pH, mg/L	7.3	

RECEIVED

APR 03 1985

LOG NO: P85-02-310

Received: 26 FEB 85

Reported: 01 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014

Requisition: WELL #5

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
02-310-1	Well #5 Q1014	22 FEB 85
PARAMETER	02-310-1	
Quadruplicate Conductivity:		
Sp. Cond., Average, umhos/cm	1700	
Sp. Cond., Std. Deviation, umhos/cm	0.0	
Sp. Cond., 1st Replicate, umhos/cm	1700	
Sp. Cond., 2nd Replicate, umhos/cm	1700	
Sp. Cond., 3rd Replicate, umhos/cm	1700	
Sp. Cond., 4th Replicate, umhos/cm	1700	
Quadruplicate TOC:		
TOC, Average, mg/L	<3	
TOC, Standard Deviation, mg/L	0	
TOC, 1st Replicate, mg/L	<3	
TOC, 2nd Replicate, mg/L	<3	
TOC, 3rd Replicate, mg/L	<3	
TOC, 4th Replicate, mg/L	<3	
Quadruplicate TOX:		
Total Organic Halides (TOX), ug/L	190	
TOX, 2nd Replicate, ug/L	180	
TOX, 3rd Replicate, ug/L	210	
TOX, 4th Replicate, ug/L	190	
TOX, Average, ug/L	190	
TOX, Standard Deviation, ug/L	13	

RECEIVED
APR 03 1985

LOG NO: P85-02-310

Received: 26 FEB 85

Reported: 01 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014

Requisition: WELL #5

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
02-310-1	Well #5 Q1014	22 FEB 85
PARAMETER	02-310-1	
Turbidity, NTU	1.2	
Sulfide, mg/L	<1.0	
Hexavalent Chromium, mg/L	<0.05	
Nickel, mg/L	<0.0040	
Zinc, mg/L	<0.019	
Nitric Acid Digestion, Date	03/12/85	
Ammonia Nitrogen, mg/L	0.11	

Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

LOG NO: P85-03-176

Received: 11 MAR 85

Reported: 15 APR 85

Final Report

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-176-1	MW #1 Q1014	11 MAR 85	
03-176-2	MW #4 Q1014	11 MAR 85	
PARAMETER	03-176-1	03-176-2	
Arsenic, mg/L	<0.0031	<0.0031	
Barium, mg/L	<0.34	<0.34	
Cadmium, mg/L	<0.0002	0.78	
Chromium, mg/L	<0.0005	500	
Fluoride, mg/L	0.30	0.26	
Lead, mg/L	<0.0046	<0.0046	
Mercury, mg/L	<0.001	<0.002	
Nitrate Nitrogen			
Nitrate (as NO3), mg/L	31	81	
Nitrate (as N), mg/L	7.0	18	
Selenium, mg/L	0.0056	<0.0041	
Silver, mg/L	<0.00023	<0.00023	

LOG NO: P85-03-176

Received: 11 MAR 85

Reported: 15 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-176-1	MW #1 Q1014	11 MAR 85	
03-176-2	MW #4 Q1014	11 MAR 85	
PARAMETER	03-176-1	03-176-2	
Title 22 Organics in Water			
Date Extracted	03/18/85	03/18/85	
Date Analyzed	03/25/85	03/25/85	
2,4,5-TP (SILVEX), ug/L	<0.5	<0.5	
2,4-D, ug/L	<2.5	<2.5	
Endrin, ug/L	<0.1	<0.1	
Lindane, ug/L	<0.05	<0.05	
Methoxychlor, ug/L	<0.3	<0.3	
Toxaphene, ug/L	<1	<1	
Radioactivity			
Gross Alpha, pCi/L	2.4 \pm 3.3	1.7 \pm 6.2	
Gross Beta, pCi/L	-15 \pm 19	-40 \pm 42	
Chloride, mg/L	330	2300	
Iron, mg/L	<0.1	<0.1	
Manganese, mg/L	0.73	3.7	
Phenolics, mg/L	<0.05	<0.05	
Sodium, mg/L	100	180	
Sulfate (as SO ₄), mg/L	240	150	

LOG NO: P85-03-176

Received: 11 MAR 85

Reported: 15 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-176-1	MW #1 Q1014	11 MAR 85	
03-176-2	MW #4 Q1014	11 MAR 85	
PARAMETER		03-176-1	03-176-2
Quadruplicate pH:			
pH, Average, mg/L		7.3	6.3
pH, Standard Deviation, mg/L		0.0	0.0
pH, 2nd Replicate, mg/L		7.3	6.3
pH, 3rd Replicate, mg/L		7.3	6.3
pH, 4th Replicate, mg/L		7.3	6.3
pH, mg/L		7.3	6.3
Quadruplicate Conductivity:			
Sp. Cond., Average, umhos/cm		2300	6400
Sp. Cond., Std. Deviation, umhos/cm		50	0.0
Sp. Cond., 1st Replicate, umhos/cm		2300	6400
Sp. Cond., 2nd Replicate, umhos/cm		2300	6400
Sp. Cond., 3rd Replicate, umhos/cm		2300	6400
Sp. Cond., 4th Replicate, umhos/cm		2200	6400

LOG NO: P85-03-176

Received: 11 MAR 85

Reported: 15 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-176-1	MW #1 Q1014	11 MAR 85	
03-176-2	MW #4 Q1014	11 MAR 85	
PARAMETER	03-176-1	03-176-2	
Quadruplicate TOC:			
TOC, Average, mg/L	3.7	36	
TOC, Standard Deviation, mg/L	0.7	2.9	
TOC, 1st Replicate, mg/L	3.6	32	
TOC, 2nd Replicate, mg/L	4.6	38	
TOC, 3rd Replicate, mg/L	3.5	38	
TOC, 4th Replicate, mg/L	<3	35	
Quadruplicate TOX:			
Total Organic Halides (TOX), mg/L	<0.05	<0.05	
TOX, 2nd Replicate, mg/L	<0.05	<0.05	
TOX, 3rd Replicate, mg/L	<0.05	<0.05	
TOX, 4th Replicate, mg/L	<0.05	<0.05	
TOX, Average, mg/L	<0.05	<0.05	
TOX, Standard Deviation, mg/L	0.0	0.0	
Turbidity, NTU	12	2.2	
Ammonia Nitrogen (as N), mg/L	0.15	0.10	
Sulfide, mg/L	<1.0	<1.0	
Hexavalent Chromium, mg/L	<0.05	500	
Nickel, mg/L	0.0077	0.0053	
Zinc, mg/L	<0.019	0.06	

LOG NO: P85-03-176

Received: 11 MAR 85

Reported: 15 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED	
03-176-1	MW #1 Q1014	11 MAR 85	
03-176-2	MW #4 Q1014	11 MAR 85	
PARAMETER		03-176-1	03-176-2
Nitric Acid Digestion, Date		03/12/85	03/12/85
Copper, mg/L		<0.08	<0.08

Edward Wilson, Laboratory Director

BROWN AND CALDWELL



ANALYTICAL LABORATORIES

LOG NO: P85-03-196

Received: 12 MAR 85

Reported: 24 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
03-196-1	WELL #6 Q1014-1	12 MAR 85
PARAMETER	03-196-1	
Arsenic, mg/L	<0.0026	
Barium, mg/L	<0.3	
Cadmium, mg/L	<0.0002	
Chromium, mg/L	0.0038	
Lead, mg/L	<0.0050	
Mercury, mg/L	<0.001	
Selenium, mg/L	0.010	
Silver, mg/L	<0.06	
Iron, mg/L	0.22	
Manganese, mg/L	0.53	
Sodium, mg/L	85	
Nickel, mg/L	<0.0048	
Zinc, mg/L	<0.03	
Copper, mg/L	<0.08	
Nitric Acid Digestion, Date	04/12/85	
Fluoride, mg/L	0.34	
Chloride, mg/L	79	
Sulfate (as SO ₄), mg/L	690	
Hexavalent Chromium, mg/L	<0.05	
Sulfide, mg/L	<0.1	
Ammonia Nitrogen (as N), mg/L	0.25	

LOG NO: P85-03-196

Received: 12 MAR 85

Reported: 24 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
03-196-1	WELL #6 Q1014-1	12 MAR 85
PARAMETER	03-196-1	
Phenolics, mg/L	<0.1	
Nitrate Nitrogen		
Nitrate (as NO ₃), mg/L	28	
Nitrate (as N), mg/L	6.3	
Radioactivity		
Gross Alpha, pCi/L	5.4 ±2.0	
Gross Beta, pCi/L	4.4 ±12	
Quadruplicate pH:		
pH, Average, Units	7.6	
pH, Standard Deviation, Units	0	
pH, 2nd Replicate, Units	7.6	
pH, 3rd Replicate, Units	7.6	
pH, 4th Replicate, Units	7.6	
pH, Units	7.6	
Quadruplicate Conductivity:		
Sp. Cond., Average, umhos/cm	1400	
Sp. Cond., Std. Deviation, umhos/cm	0	
Sp. Cond., 1st Replicate, umhos/cm	1400	
Sp. Cond., 2nd Replicate, umhos/cm	1400	
Sp. Cond., 3rd Replicate, umhos/cm	1400	
Sp. Cond., 4th Replicate, umhos/cm	1400	

LOG NO: P85-03-196

Received: 12 MAR 85

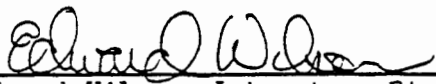
Reported: 24 APR 85

Ken Durand
J.H. KLEINFELDER & ASSOCIATES
901 W. Victoria St., Suite G
Compton, CA 90220

Purchase Order: Q1014-1

REPORT OF ANALYTICAL RESULTS

LOG NO	SAMPLE DESCRIPTION, GROUND WATER SAMPLES	DATE SAMPLED
03-196-1	WELL #6 Q1014-1	12 MAR 85
PARAMETER	03-196-1	
Quadruplicate TOX:		
Total Organic Halides (TOX), mg/L	0.09	
TOX, 2nd Replicate, mg/L	0.09	
TOX, 3rd Replicate, mg/L	0.11	
TOX, 4th Replicate, mg/L	0.11	
TOX, Average, mg/L	0.10	
TOX, Standard Deviation, mg/L	0.01	
Title 22 Organics in Water		
Date Extracted	04/11/85	
Date Analyzed	04/15/85	
2,4,5-TP (SILVEX), ug/L	<0.1	
2,4-D, ug/L	<0.5	
Endrin, ug/L	<0.1	
Lindane, ug/L	<0.05	
Methoxychlor, ug/L	<0.3	
Toxaphene, ug/L	<1	
Turbidity, NTU	3.5	


Edward Wilson, Laboratory Director

LABORATORY ANALYSIS

SOUTHERN CALIFORNIA

CHEMICAL COMPANY

GROUNDWATER MONITORING

WELLS BY DOHS LAB

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/11/85	Lab. No. 5710
Name and Address of Owner, or Source Southern Calif. Chemical Co.		Collected By AAK	Serial Number R 33980
Sampling Point Well #1		County Los Angeles	Date and Time Collected 3/11/85, 11:30 AM
Type of Sample: <input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) groundwater			
Sample Size 5.86		Collection Period (Date and Time) 3.50	
Air: Finish 11.92		Alpha 6.24	
Start 11:24		Gross Beta 6.24	
Net 200 TS HAM		Radium 6.24	
Composite Sample:		Finish 11:35	
		Start 11:35	

FORM LAB 803 (REV. 10-79)

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section SAMPLE FOR CHEMICAL ANALYSIS		Date Received 3-11-85	Lab. No. 14451
Purveyor and Address (include city and county) Southern Calif. Chem. Co.		System Number 21102	Serial Number C
Sampling Point Well #1		Collected by AAK	Date and hour Collected 3/11/85, 11:35 AM
Type of Sample <input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other groundwater		Send Report To <input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWCCB # 4 <input type="checkbox"/> Other	

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <input type="checkbox"/> Hardness <input type="checkbox"/> Mg <input type="checkbox"/> HCO ₃ <input type="checkbox"/> Fe Total <input type="checkbox"/> CO ₃ <input type="checkbox"/> Mn <input type="checkbox"/> OH <input type="checkbox"/> Na <input type="checkbox"/> Total Alk. <input type="checkbox"/> K <input type="checkbox"/> Cl <input type="checkbox"/> pH <input type="checkbox"/> SO ₄ <input type="checkbox"/> Total Dissolved Solids <input type="checkbox"/> F <input type="checkbox"/> NO ₃		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides group none detected (< 0.1 ppb)
<input type="checkbox"/> Turb. TU <input type="checkbox"/> NH ₃ -N <input type="checkbox"/> BOD <input type="checkbox"/> Spec. Cond. in mhos/cm <input type="checkbox"/> ORG-N <input type="checkbox"/> Grease		<input type="checkbox"/> Susp. Solids <input type="checkbox"/> PO ₄ <input type="checkbox"/> Set Solids ml/1 hour <input type="checkbox"/> MBAS	

Form LAB 800 (2-80)

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section
SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Calif. Chem. Co. Santa Fe Springs

Sampling Point

Well # 1

Date Received

3-11-85

Lab. No.

14453

System Number

000000

Serial Number

C 21153

Collected by

AAK/FF

Date and Hour Collected

3/11/85, 11:00m

Type of Sample

☐ Raw Surface Water
☐ Drinking Water
☐ Raw
☐ Treated

☐ Waste water:
☐ Raw ☐ Chlorinated
☐ Trade Waste
☒ Other Groundwater

Send Report To

☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWCCB # 4 ☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS		TRACE ELEMENTS		Other analyses desired (specify):	
(mg/l as Ca CO ₃)					
<input type="checkbox"/> Ca		<input type="checkbox"/> Al		V.O.A. methylene chloride = 34 mg/l trichloroethylene = 16 mg/l perchloroethylene = < 0.5 mg/l	
<input type="checkbox"/> Mg		<input type="checkbox"/> Ag			
<input type="checkbox"/> Fe Total		<input type="checkbox"/> As			
<input type="checkbox"/> Mn		<input type="checkbox"/> B			
<input type="checkbox"/> Na		<input type="checkbox"/> Cd			
<input type="checkbox"/> K		<input type="checkbox"/> Cr			
<input type="checkbox"/> pH		<input type="checkbox"/> Cu			
<input type="checkbox"/> Total Dissolved Solids		<input type="checkbox"/> Hg			
<input type="checkbox"/> Hardness		<input type="checkbox"/> Pb			
<input type="checkbox"/> HCO ₃		<input type="checkbox"/> Ni			
<input type="checkbox"/> CO ₃		<input type="checkbox"/> Se			
<input type="checkbox"/> OH		<input type="checkbox"/> Zn			
<input type="checkbox"/> Total Alk.		<input type="checkbox"/>			
<input type="checkbox"/> Cl					
<input type="checkbox"/> SO ₄					
<input type="checkbox"/> F					
<input type="checkbox"/> NO ₃					
				Date Reported 3-12-85	
				Analyst P.H.	
<input type="checkbox"/> Turb. TU		<input type="checkbox"/> NH ₃ -N		<input type="checkbox"/> Susp. Solids	
<input type="checkbox"/> Spec. Cond. μ mhos/cm		<input type="checkbox"/> ORG-N		<input type="checkbox"/> Set Solids ml/1/hour	
<input type="checkbox"/> BOD		<input type="checkbox"/> Grease		<input type="checkbox"/> PO ₄	
<input type="checkbox"/> MBAS					

Form LAB-800 (2-80)

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION
SAMPLE FOR MICROBIOLOGICAL EXAMINATION

Purveyor and Address

Southern Calif. Chem. Co. SFS

Sampling Point

Well # 1

System Number

000000

DATE

3/11/85

TIME

3:15

LAB NO.

10082

COUNTY

Los Angeles

DATE AND HOUR COLLECTED

3/11/85, 11:15

COLLECTED BY

AAK

BOTTLE CAP NUMBER

ATY

TYPE OF SAMPLE:

☐ DRINKING WATER (ANY SOURCE)
☐ SEWAGE
☐ RAW SURFACE WATER
☒ OTHER (SPECIFY) Groundwater

SEND REPORT TO:

☐ SEB DIST ☐ COUNTY HD
☒ RWCCB # 4 ☐ OTHER
☐ NAT'L PARK
PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☐ FECAL COLIFORM
☐ SPC ☐ OTHER

(TO BE Filled IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PORTIONS IN ML (LOGS)	1	1	1	1	1															
PRESUMPTIVE TEST	24																			
CONFIRMED TEST	24																			
E. C.	24																			

LABORATORY REMARKS

☐ LEAKED IN TRANSIT
☐ INSUFFICIENT SAMPLE

RESULTS
COLIFORM/100ml
☒ MPN < 20
☐ MF
FECAL COLIFORM/100ml
☐ MPN
☐ MF
SPC/ml or 35C
C1: RES. mg/liter
ANALYST RS 3/14/85

REV. 8/81 FORM LAB 801
8117-410 12 81 5084 THE CALIF. WOSP

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-11-85	Lab. No. 14449
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern California Edison Co. SFS		System Number 000000	Serial Number C 21154
Sampling Point Well #2197A		Collected by AAK/FF	Date and Hour Collected 3/11/85, 11:10 AM
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other Groundwater		
Send Report To		<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other	

Results are expressed as mg/l unless specified

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃)		TRACE ELEMENTS <input checked="" type="checkbox"/> Other analyses desired (specify): Cr+6 = none detected Fe PHENOLS = 4.001 mg/l	
<input type="checkbox"/> Ca 180 <input type="checkbox"/> Mg 54 <input type="checkbox"/> Fe Total 40.95 <input type="checkbox"/> Mn 0.75 <input type="checkbox"/> Na 104 <input type="checkbox"/> K 7 <input type="checkbox"/> pH 7.4 <input checked="" type="checkbox"/> Total Solids 1313	<input type="checkbox"/> Hardness 670 <input type="checkbox"/> HCO ₃ 300 <input type="checkbox"/> CO ₃ 0 <input type="checkbox"/> OH 0 <input type="checkbox"/> Total Alk. 300 <input type="checkbox"/> Cl 306 <input type="checkbox"/> SO ₄ 240 <input type="checkbox"/> F 0.35 <input type="checkbox"/> NO ₃ 211	<input type="checkbox"/> Al <input checked="" type="checkbox"/> Ag 10.001 <input checked="" type="checkbox"/> As 10.01 <input type="checkbox"/> B <input checked="" type="checkbox"/> Cd <0.001 <input checked="" type="checkbox"/> Cr 0.014 <input checked="" type="checkbox"/> Cu 0.042 <input checked="" type="checkbox"/> Hg <0.001 <input checked="" type="checkbox"/> Pb 10.01 <input checked="" type="checkbox"/> Ni 0.10 <input checked="" type="checkbox"/> Se 10.01 <input checked="" type="checkbox"/> Zn 0.03 <input checked="" type="checkbox"/> Ba 0.101	Date Reported 4-8-85 Analyst HLVP ST MO
<input type="checkbox"/> Turb <input checked="" type="checkbox"/> Sec. Cond. 2018	<input checked="" type="checkbox"/> NH ₃ -N 0.24 <input type="checkbox"/> ORG-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Suso. Solids <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-6-85	Lab. No. 1438-3
SAMPLE FOR CHEMICAL ANALYSIS		System Number 000000	Serial Number C 21157
Purveyor and Address (include city and county) Southern Calif. Chem. Co. SFS		Collected by AAK/FM	Date and Hour Collected 3/6/85, 11 AM
Sampling Point Well # 2			
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other g/water		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca <input type="checkbox"/> Hardness <input type="checkbox"/> Mg <input type="checkbox"/> HCO ₃ <input type="checkbox"/> Fe Total <input type="checkbox"/> CO ₃ <input type="checkbox"/> Mn <input type="checkbox"/> OH <input type="checkbox"/> Na <input type="checkbox"/> Total Alk. <input type="checkbox"/> K <input type="checkbox"/> Cl <input type="checkbox"/> pH <input type="checkbox"/> SO ₄ <input type="checkbox"/> Total Dissolved Solids <input type="checkbox"/> F <input type="checkbox"/> NO ₃		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al <input type="checkbox"/> Ag <input type="checkbox"/> As <input type="checkbox"/> B <input type="checkbox"/> Cd <input type="checkbox"/> Cr <input type="checkbox"/> Cu <input type="checkbox"/> Hg <input type="checkbox"/> Pb <input type="checkbox"/> Ni <input type="checkbox"/> Se <input type="checkbox"/> Zn	<input type="checkbox"/> Other analyses desired (specify): <p style="text-align: center;">V.O.A * see attached sheet</p>
<input type="checkbox"/> Turb. TU <input type="checkbox"/> NH ₃ -N <input type="checkbox"/> BOD <input type="checkbox"/> Spec. Cond. μ mhos/cm <input type="checkbox"/> ORG-N <input type="checkbox"/> Grease		<input type="checkbox"/> Susp. Solids <input type="checkbox"/> PO ₄ <input type="checkbox"/> Set Solids ml/1/hour <input type="checkbox"/> MBAS	

Form LAB 800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/11/85	Lab. No. 5708
Name and Address of Owner, or Source Southern Calif. Chem. Co.		Collected By FM/AAK	Serial Number R 33983
Sampling Point Southern Calif. Chem. Co. Well #2		County LA	Date and Time Collected 3/6/85, 11:30
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) g/w			
Sample Size		Collection Period (Date and Time)	
Air: Finish Start 60 MIN - 55 Net MAGNETIC		Finish 1:20 Start 6:00 AM 2007 P.S. 11/11	
Composite Sample:		Finish Start	
<p style="text-align: center;">Radium Send result to Hain Tan Southern Calif. Lab.</p>			

FORM LAB 803 (REV. 10-79)

VOA

COLLECTED

3/6/85 11AM

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

F. MELE

LAB NUMBER:

14383

WELL NO. 2 *

SERIAL NUMBER:

C 21157

ANALYST:

P.A.

DATE REPORTED:

3/8/85

VOC

1. 1,1 dichloroethylene = 1.7 ug/L ✓

2. methylene chloride = 1.1 ug/L

3. 1,1 dichloroethane = 2.2 ug/L

4. (C) 1,2 dichloroethylene = 9.2 ug/L

5. trichloroethylene = 15 ug/L ✓

6. Dimethyl disulphide

7. Dimethyl trisulphide

Purveyor and Address (include city and county)
*Southern Calif. Chem Co
Santa Fe Springs*

Sampling Point
well #2

Date Received

3-6-85

Lab. No.

14386

System Number

000000

Serial Number

C 21101

Collected by

FM/AIC

Date and Hour Collected

3/6/85, 11:15

Type of Sample

☐ Raw Surface Water
☐ Drinking Water

Waste water:

☐ Raw ☐ Chlorinated

☐ Raw

☐ Trade Waste

☐ Treated

☐ Other

Send Report To

☐ WSS Dist.

☐ County HD

☐ DOT Dist.

☐ National Park Serv.

☒ RWOCB

☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS

<input type="checkbox"/> Ca	<input type="checkbox"/> Hardness
<input type="checkbox"/> Mg	<input type="checkbox"/> HCO ₃
<input type="checkbox"/> Fe Total	<input type="checkbox"/> CO ₃
<input type="checkbox"/> Mn	<input type="checkbox"/> OH
<input type="checkbox"/> Na	<input type="checkbox"/> Total Alk.
<input type="checkbox"/> K	<input type="checkbox"/> Cl
<input type="checkbox"/> pH	<input type="checkbox"/> SO ₄
<input type="checkbox"/> Total Dissolved Solids	<input type="checkbox"/> F
	<input type="checkbox"/> NO ₃

TRACE ELEMENTS

<input type="checkbox"/> Al
<input type="checkbox"/> Ag
<input type="checkbox"/> As
<input type="checkbox"/> B
<input type="checkbox"/> Cd
<input type="checkbox"/> Cr
<input type="checkbox"/> Cu
<input type="checkbox"/> Hg
<input type="checkbox"/> Pb
<input type="checkbox"/> Ni
<input type="checkbox"/> Se
<input type="checkbox"/> Zn

☒ Other analyses desired (specify):

*Pesticide (group 2)
none detected
($< 0.1 \text{ ppb}$)*

Date Reported

3-28-85

Analyst

DT

<input type="checkbox"/> Turb. TU	<input type="checkbox"/> NH ₃ -N	<input type="checkbox"/> BOD	<input type="checkbox"/> Susp. Solids	<input type="checkbox"/> PO ₄
<input type="checkbox"/> Spec. Cond. $\mu\text{mhos/cm}$	<input type="checkbox"/> ORG-N	<input type="checkbox"/> Grease	<input type="checkbox"/> Set Solids ml/1 hour	<input type="checkbox"/> MBAS

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION
SAMPLE FOR MICROBIOLOGICAL EXAMINATION.

DATE

TIME

LAB. NO.

3/6/85

3:15

10080

PURVEYOR AND ADDRESS

Southern Calif. Chem. Co.

COUNTY

LA

DATE AND HOUR COLLECTED

2/22 3:30pm

SAMPLING POINT

well #3

SYSTEM NUMBER

11 X 11

COLLECTED BY

FM/AK

BOTTLE CAP NUMBER

05201

TYPE OF SAMPLE:

☐ DRINKING WATER (ANY SOURCE)

☐ SEWAGE

☐ RAW SURFACE WATER

☒ OTHER (SPECIFY) g/water

SEND REPORT TO:

☐ SUB DIST

☐ COUNTY HD

☒ RWCCB # 4

☐ OTHER

☐ NATL. PARK

PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM

☐ FECAL COLIFORM

☐ SPC

☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----

PORTIONS IN ML (LOGS)

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

PRESUMPTIVE TEST

24

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

CONFIRMED TEST

24

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

E. C.

24

1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

LABORATORY REMARKS

☐ LEAKED IN TRANSIT

☐ INSUFFICIENT SAMPLE

RESULTS

COLIFORM/100ml

☐ MPN

☐ MF

FECAL COLIFORM/100ml

☒ MPN

☐ MF

SPC/ml or 35C

C1 RES. mg/liter

ANALYST

MP

REV. 9/81 FORM LAB 801 84717-443 12-81 JRM 118-CMA W009

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section
SAMPLE FOR CHEMICAL ANALYSIS

Date Received

3-6-85

Lab. No.

14388

PURVEYOR AND ADDRESS (include city and county)

Southern Calif. Chem. Co. SCS

System Number

11 X 11

Serial Number

C 21162

Sampling Point

well #3

Collected by

AAK/FM

Date and Hour Collected

3/6/85 3:15pm

Type of Sample

☐ Raw Surface Water

☐ Waste water:

☐ Drinking Water

☐ Raw

☐ Chlorinated

☐ Raw

☐ Trace Waste

☐ Treated

☒ Other g/w

Send Report To

☐ WSS Dist. #

☐ County HD

☐ DOT Dist. #

☐ National Park Serv.

☒ RWCCB # 4

☐ Other

*Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS

(mg/l as CaCO₃)

☐ Ca

1618

☐ Mg

116

☐ Fe Total

40.015

☐ Mn

0.6

☐ Na

157

☐ K

3

☐ pH

7.5

☐ Total Dissolved Solids

196.2

☐ Hardness

214.5

☐ HCO₃

2910

☐ CO₃

110

☐ OH

110

☐ Total Alk.

2910

☐ Cl

11618

☐ SO₄

21010

☐ F

0.37

☐ NO₃

1116

TRACE ELEMENTS

☐ Al

20.001

☒ Ag

20.01

☒ As

20.01

☐ B

20.001

☒ Cd

20.01

☒ Cr

20.01

☒ Cu

20.02

☒ Hg

20.001

☒ Pb

20.01

☒ Ni

20.05

☒ Se

20.005

☒ Zn

20.01

☒ Ba

2.111

☒ Other analyses desired (specify):

Phenols = .015 mg/ml

Cr⁶⁺ = none detected (4.001 mg/l)

Date Reported

3-21-85

Analyst

NT MA HL

☐ Turb. TU

☒ NH₃-N

0.48

☐ BOD

☐ Susp. Solids

☐ PO₄

☒ Spec. Cond. u mms/cm

1497

☐ ORG-N

☐ Grease

☐ Set Solids ml/1/hour

☐ MBAS

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)
Southern Calif. Chem. Co

Sampling Point
Well #3

Type of Sample
☐ Raw Surface Water
☐ Drinking Water
☐ Raw
☐ Treated
☐ Waste water:
☐ Raw
☐ Chlorinated
☐ Trade Waste
☒ Other *gl water*

Date Received
3-6-85

System Number
AAK/FM

Lab. No.
14384

Serial Number
21161

Date and Hour Collected
3/6/85 2:15 pm

Send Report To
WSS Dist. # 4

County HD
14:15

DOT Dist. #
4

National Park Serv.
Other

Results are expressed as mg/l unless specified

☐ GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

☐ Ca
☐ Mg
☐ Fe Total
☐ Mn
☐ Na
☐ K
☐ pH
☐ Total Dissolved Solids

☐ Hardness
☐ HCO₃
☐ CO₃
☐ OH
☐ Total Alk.
☐ Cl
☐ SO₄
☐ F
☐ NO₃

TRACE ELEMENTS

☐ Al
☐ Ag
☐ As
☐ B
☐ Cd
☐ Cr
☐ Cu
☐ Hg
☐ Pb
☐ Ni
☐ Se
☐ Zn

☒ Other analyses desired (specify):
VOA
see attached sheet

Date Reported
3-8-85

Analyst
PH

☐ Turb. TU
☐ Spec. Cond. in mhos/cm
☐ NH₃-N
☐ ORG-N
☐ BCO
☐ Grease
☐ Susp. Solids
☐ Set Solids ml/1 hour
☐ PO₄
☐ MBAS

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SAMPLE FOR RADIOLOGICAL ANALYSIS

Name and Address of Owner, or Source
Southern Calif. Chem. Co

Sampling Point
Well 3

Type of Sample:
☐ Air
☐ Sewage Effluent
☐ Sewage Sludge
☐ Milk
☐ Water
☒ Other (Specify) *Water*

Sample Size
100 ml

Collection Period (Date and Time)
3/11/85 11:29

Counting Period
3/11/85 11:29

Net
3.93

Composite Sample:
3.93

Lab No.
5707

Serial Number
R 33978

Date and Time Collected
2/22, 3:20 pm

County
LA

RWQCB# 4

7.14

3.93

Alpha

Grass Beta

Radium

send result to

Hiam Tan

Southern Calif. Lab

Form LAB 803 (REV. 10-79)

VOA

DATE COLLECTED

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS3/6/85 1415
HRS

LAB NUMBER:

14384

WELL NO. 3

SERIAL NUMBER:

C 21161

ANALYST:

P.H.

DATE REPORTED:

3/8/85

VOC

1. trichlorofluoromethane (probable)
2. 1,1 dichloroethylene = 5.0 mg/L
3. methylene chloride = 1.5 mg/L
4. 1,1 dichloroethane = 2.2 mg/L
5. (C) 1,2 dichloroethylene = 0.53 mg/L
6. chloroform = 29 mg/L
7. carbon tetrachloride = 37 mg/L
8. benzene = 1.4 mg/L
9. trichloroethylene = 154 mg/L
10. Dimethyl disulphide
11. Perchloroethylene = 0.4 mg/L
12. trichlorobenzene isomer

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Pipe or App. Address (include city and county)

Southern Calif. Chem. Co.

Date Received

3-1-85

(Leave Blank)

Lab. No.

14385

System Number

100000

Serial Number

C 21076

Sampling Point

Well #3

Collected by

FM/AK

Date and Hour Collected

3/5/85, 3:30 PM

Type of Sample

☐ Raw Surface Water

☐ Waste water:

☐ Drinking Water

☐ Raw

☐ Chlorinated

☐ Raw

☐ Trade Waste

☐ Treated

☒ Other *9/1 water*

Send Report To

☐ WSS Dist. #

☐ County HD

☐ DOT Dist. #

☐ National Park Serv.

☒ RWCCB # *4*

☐ Other

Results are expressed as mg/l unless specified

☐ GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

☐ Ca

100

☐ Hardness

100

☐ Mg

100

☐ HCO₃

100

☐ Fe Total

100

☐ CO₃

100

☐ Mn

100

☐ OH

100

☐ Na

100

☐ Total Alk

100

☐ K

100

☐ Cl

100

☐ pH

7.5

☐ SO₄

100

☐ Total Dissolved Solids

100

☐ F

100

☐ NO₃

100

TRACE ELEMENTS

☐ Al

☐ Ag

☐ As

☐ B

☐ Cd

☐ Cr

☐ Cu

☐ Hg

☐ Pb

☐ Ni

☐ Se

☐ Zn

☐

☒ Other analyses desired (specify):

Pesticides (group 2)
none detected
<0.1 ppb

Date Reported

3-28-85

Analyst

DT

☐ Turb. TU

☐ NH₃-N

☐ BOD

☐ Susp. Solids

☐ PO₄

☐ Spec. Cond. μ mhos/cm

☐ CRG-N

☐ Grease

☐ Set Solids ml/1/hour

☐ MBAS

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Southern Chem. Co. SFS
WELL # 4

Date Received

3-11-85

Lab. No.

14450

System Number

000000

Serial Number

C 21166

Sampling Point

Well # 4

Collected by

AAIL / FFA

Date and Hour Collected

3/11/85, 17:42

Type of Sample

- ☐ Raw Surface Water ☐ Waste water:
☐ Drinking Water ☐ Raw ☐ Chlorinated
☐ Raw ☐ Trade Waste
☐ Treated ☒ Other *W*

Send Report To

- ☐ WSS Dist. # ☐ County HD
☐ DOT Dist. # ☐ National Park Serv.
☒ RWCCB # *4* ☐ Other

Results are expressed as mg/l unless specified

☒ GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

<input type="checkbox"/> Ca <i>980</i>	<input type="checkbox"/> Hard-ness <i>2550</i>
<input type="checkbox"/> Mg <i>124</i>	<input type="checkbox"/> HCO ₃ <i>5102</i>
<input type="checkbox"/> Fe Total <i>01.95</i>	<input type="checkbox"/> CO ₃ <i>110</i>
<input type="checkbox"/> Mn <i>31.4</i>	<input type="checkbox"/> OH <i>110</i>
<input type="checkbox"/> Na <i>203</i>	<input type="checkbox"/> Total Alk. <i>5102</i>
<input type="checkbox"/> K <i>15</i>	<input type="checkbox"/> Cl <i>171010</i>
<input type="checkbox"/> pH <i>6.2</i>	<input type="checkbox"/> SO ₄ <i>2120</i>
<input type="checkbox"/> Total Dissolved Solids <i>5650</i>	<input type="checkbox"/> F <i>0.31</i>
	<input type="checkbox"/> NO ₃ <i>117</i>

TRACE ELEMENTS

<input type="checkbox"/> Al	<i><0.001</i>
<input checked="" type="checkbox"/> Ag	<i><0.01</i>
<input checked="" type="checkbox"/> As	<i><0.01</i>
<input type="checkbox"/> B	
<input checked="" type="checkbox"/> Cd	<i>0.560</i>
<input checked="" type="checkbox"/> Cr	<i>5.20</i>
<input checked="" type="checkbox"/> Cu	<i>0.02</i>
<input checked="" type="checkbox"/> Hg	<i>0.12</i>
<input checked="" type="checkbox"/> Pb	<i><0.01</i>
<input checked="" type="checkbox"/> Ni	<i>0.05</i>
<input checked="" type="checkbox"/> Se	<i><0.005</i>
<input checked="" type="checkbox"/> Zn	<i>0.05</i>
<input checked="" type="checkbox"/> Ba	

☒ Other analyses desired (specify):

Hex. Cr = 469 mg/l

Phenols = .001 mg/ml

Date Reported

4-8-85

Analyst

HL NT MDT

<input type="checkbox"/> Turb. TU	<i>0.24</i>	<input type="checkbox"/> BOD	<i>--</i>	<input type="checkbox"/> Susp. Solids	<i>--</i>
<input checked="" type="checkbox"/> Spec. Cond. μ mhos/cm	<i>6619</i>	<input type="checkbox"/> ORG-N	<i>--</i>	<input type="checkbox"/> Set Solids ml/1/hour	<i>--</i>
		<input type="checkbox"/> Grease	<i>--</i>	<input type="checkbox"/> MBAS	<i>--</i>

(REV. 9/81) FORM LAB 001
04717-449 12-BIT/11W*CAM ①W05P

Results are expressed as mg/l unless specified

Form LAB-800 (2-80)

VOA

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

COLLECTED

3/11/85 1330 HRS

LAB NUMBER:

14454

SERIAL NUMBER:

C 21165

ANALYST:

P.H.

WELL # 4

DATE REPORTED:

3/12/85

VOC	
1. 1,1 dichloroethylene = 52 $\mu\text{g/L}$	15 Ethyl toluene isomer
2. Methylene chloride = 93 $\mu\text{g/L}$	
3. 1,1 dichloroethane = 41 $\mu\text{g/L}$	
4. (C) 1,2 dichloroethylene = 14 $\mu\text{g/L}$	
5. Chloroform = 24 $\mu\text{g/L}$	
6. 1,2 dichloroethane = 13 $\mu\text{g/L}$	
7. Benzene = 3.7 $\mu\text{g/L}$	
8. Trichloroethylene = 225 $\mu\text{g/L}$	
9. Toluene = 4500 $\mu\text{g/L}$	
10. Ethylbenzene = 2100 $\mu\text{g/L}$	
11. m,p-Xylenes = 2000 $\mu\text{g/L}$	
12. o-Xylene = 1100 $\mu\text{g/L}$	
13. Cumene	
14. n-propyl benzene	

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/1/85	Lab No. 5709
Name and Address of Owner, or Source Southern Calif Chem Co San Francisco Springs		Collected By AAK	Serial Number R 33979
Sampling Point Well # 4		County Los Angeles	Date and Time Collected 3/1/85, 1:30 PM
Type of Sample: F.V. REGION			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) Groundwater			
Sample Size 200		Collection Period (Date and Time)	
Air: Finish 8:00 AM 3/1/85 Start 7:00 AM 3/1/85 Net 1000 Composite Sample: 200 T'S HAM		Finish 11:00 AM 3/1/85 Start 7:00 AM 3/1/85 Net 1000 Finish 11:00 AM 3/1/85 Start 7:00 AM 3/1/85	
FORM LAB 803 (REV. 10-79)		8.93 \pm 7.43 pCi/l Alpha 0.53 \pm 13.43 pCi/l Gross Beta Radium send result to HAN TAN Southern Calif Lab.	

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-11-85	Lab. No. 14452
SAMPLE FOR CHEMICAL ANALYSIS		System Number 000000	Serial Number C 21103
Purveyor and Address (include city and county) Southern Calif. Chemical Co. San Juan Capistrano		Collected by RAK	Date and Hour Collected 3/11/85, 1:55p
Sampling Point Well #4			
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste Water <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other groundwater		
		Send Report To	<input type="checkbox"/> WSS Dist. # _____ <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # _____ <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other _____

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca _____ <input type="checkbox"/> Mg _____ <input type="checkbox"/> Fe Total _____ <input type="checkbox"/> Mn _____ <input type="checkbox"/> Na _____ <input type="checkbox"/> K _____ <input type="checkbox"/> pH _____ <input type="checkbox"/> Total Dissolved Solids _____ <input type="checkbox"/> Hardness _____ <input type="checkbox"/> HCO ₃ _____ <input type="checkbox"/> CO ₃ _____ <input type="checkbox"/> OH _____ <input type="checkbox"/> Total Alk. _____ <input type="checkbox"/> Cl _____ <input type="checkbox"/> SO ₄ _____ <input type="checkbox"/> F _____ <input type="checkbox"/> NO ₃ _____		TRACE ELEMENTS <input type="checkbox"/> Al _____ <input type="checkbox"/> Ag _____ <input type="checkbox"/> As _____ <input type="checkbox"/> B _____ <input type="checkbox"/> Cd _____ <input type="checkbox"/> Cr _____ <input type="checkbox"/> Cu _____ <input type="checkbox"/> Hg _____ <input type="checkbox"/> Pb _____ <input type="checkbox"/> Ni _____ <input type="checkbox"/> Se _____ <input type="checkbox"/> Zn _____	<input checked="" type="checkbox"/> Other analyses desired (specify): Pesticides (group I) none detected < 0.1 µg/l
<input type="checkbox"/> Turb. TU _____ <input type="checkbox"/> Spec. Cond. µmhos/cm _____	<input type="checkbox"/> NH ₃ -N _____ <input type="checkbox"/> ORG-N _____	<input type="checkbox"/> BOD _____ <input type="checkbox"/> Grease _____	Date Reported 3-28-85 Analyst OT <input type="checkbox"/> Susp. Solids _____ <input type="checkbox"/> Set Solids ml/1 hour _____ <input type="checkbox"/> PO ₄ _____ <input type="checkbox"/> MBAS _____

Form LAB-800 (2-80)

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)
Southern Calif. Chemical Co.
SFS

Date Received 2-22-85 (Leave Blank) 14279

System Number C Serial Number 21170

Sampling Point Well #5

Collected by AAK/FM Date and Hour Collected 2/22, 10:15

Type of Sample ☐ Raw Surface Water ☐ Waste water: ☐ Raw ☐ Chlorinated ☐ Trade Waste ☒ Other Groundwater

☐ Drinking Water ☐ Raw ☐ Treated ☒ WSS Dist. # 4 ☐ County HD ☐ DOT Dist. # ☐ National Park Serv. ☐ Other

Send Report To 1

Results are expressed as mg/l unless specified

☒ **GENERAL MINERAL ANALYSIS** (mg/l as Ca CO₃)

☐ Ca 170 ☐ Hardness 582

☐ Mg 38 ☐ HCO₃ 313

☐ Fe Total <0.05 ☐ CO₃ 0

☐ Mn 1.25 ☐ OH 0

☐ Na 72 ☐ Total Alk. 313

☐ K 4 ☐ Cl 72

☐ pH 7.3 ☐ SO₄ 295

☐ Total Dissolved Solids 974 ☐ F 0.36

☐ NO₃ 147

TRACE ELEMENTS

☒ Al <0.001

☒ Ag <0.001

☒ As <0.001

☐ B <0.001

☒ Cd <0.001

☒ Cr <0.01

☒ Cu <0.01

☒ Hg <0.001

☒ Pb <0.01

☒ Ni <0.05

☒ Se <0.01

☒ Zn <0.02

☒ Ba <0.01

☒ Other analyses desired (specify): Pesticides and Phenols = .005 ug/ml Cr+6 = <0.001 mg/l

Date Reported 2-14-85 Analyst ST NP MLR2 MOH

☐ Turb. TU ☒ NH₃-N 1.20 ☐ BOD ☐ Susp. Solids ☐ PO₄

☒ Spec. Cond. 1378 ☐ ORG-N ☐ Grease ☐ Set Solids ml/1/hour ☐ MBAS

Form LAB 800 (2-80)

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)
Southern Calif Chem. Co

Date Received 2-22-85 (Leave Blank) 14278

System Number C Serial Number 21824

Sampling Point Well #5

Collected by AK/FM Date and Hour Collected 2/22, 10:15

Type of Sample ☐ Raw Surface Water ☐ Waste water: ☐ Raw ☐ Chlorinated ☐ Trade Waste ☒ Other g/w

☐ Drinking Water ☐ Raw ☐ Treated ☒ WSS Dist. # 4 ☐ County HD ☐ DOT Dist. # ☐ National Park Serv. ☐ Other

Send Report To 1

Results are expressed as mg/l unless specified

☐ **GENERAL MINERAL ANALYSIS** (mg/l as Ca CO₃)

☐ Ca ☐ Hardness

☐ Mg ☐ HCO₃

☐ Fe Total ☐ CO₃

☐ Mn ☐ OH

☐ Na ☐ Total Alk.

☐ K ☐ Cl

☐ pH ☐ SO₄

☐ Total Dissolved Solids ☐ F

☐ NO₃

TRACE ELEMENTS

☐ Al

☐ Ag

☐ As

☐ B

☐ Cd

☐ Cr

☐ Cu

☐ Hg

☐ Pb

☐ Ni

☐ Se

☐ Zn

☒ Other analyses desired (specify): Pesticides none detected Gr. 1 (< 0.2 %)

Date Reported 3-12-85 Analyst HT

☐ Turb. TU ☐ NH₃-N ☐ BOD ☐ Susp. Solids ☐ PO₄

☐ Spec. Cond. ☐ ORG-N ☐ Grease ☐ Set Solids ml/1/hour ☐ MBAS

Form LAB 800 (2-80)

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section SAMPLE FOR CHEMICAL ANALYSIS		Date Received 2-22-85	Lab. No. 14277
Purveyor and Address (include city and county) Southern Calif. Chem Co.		System Number [] [] [] [] [] []	Serial Number C 21169
Sampling Point Well # 5		Collected by AAK/FM	Date and Hour Collected 2/22, 10 AM
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other Ground Water <input type="checkbox"/> Treated		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other
Results are expressed as mg/l unless specified			
<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca [] [] [] [] <input type="checkbox"/> Mg [] [] [] [] <input type="checkbox"/> Fe Total [] [] [] [] <input type="checkbox"/> Mn [] [] [] [] <input type="checkbox"/> Na [] [] [] [] <input type="checkbox"/> K [] [] [] [] <input type="checkbox"/> pH [] [] <input type="checkbox"/> Total Dis-solved Solids [] [] [] [] <input type="checkbox"/> Hard-ness [] [] [] [] <input type="checkbox"/> HCO ₃ [] [] [] [] <input type="checkbox"/> CO ₃ [] [] [] [] <input type="checkbox"/> OH [] [] [] [] <input type="checkbox"/> Total Alk. [] [] [] [] <input type="checkbox"/> Cl [] [] [] [] <input type="checkbox"/> SO ₄ [] [] [] [] <input type="checkbox"/> F [] [] [] [] <input type="checkbox"/> NO ₃ [] [] [] []		<input type="checkbox"/> TRACE ELEMENTS <input type="checkbox"/> Al [] [] [] [] <input type="checkbox"/> Ag [] [] [] [] <input type="checkbox"/> As [] [] [] [] <input type="checkbox"/> B [] [] [] [] <input type="checkbox"/> Cd [] [] [] [] <input type="checkbox"/> Cr [] [] [] [] <input type="checkbox"/> Cu [] [] [] [] <input type="checkbox"/> Hg [] [] [] [] <input type="checkbox"/> Pb [] [] [] [] <input type="checkbox"/> Ni [] [] [] [] <input type="checkbox"/> Se [] [] [] [] <input type="checkbox"/> Zn [] [] [] []	
		<input checked="" type="checkbox"/> Other analyses desired (specify): V.O.A see attached sheet	
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm		<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N <input type="checkbox"/> BOD <input type="checkbox"/> Grease <input type="checkbox"/> Suss. Solids <input type="checkbox"/> Set Solids ml / hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS	

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/1/85	Lab No. 5706
Name and Address of Owner or Source Southern Calif. Chem Co.		Collected By AAK/FM	Serial Number R 33977
Sampling Point Well # 5		County LA	Date and Time Collected 2/22 10:20
Type of Sample:			
<input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) g/l			
Sample Size		Collection Period (Date and Time)	
Air: Finish [] [] [] [] Start [] [] [] [] Net [] [] [] []		Finish [] [] [] [] Start [] [] [] [] Net [] [] [] []	
Composite Sample:		Finish [] [] [] [] Start [] [] [] []	
6.24 \pm 2.43 pCi/l Alpha 5.14 \pm 2.43 pCi/l Gross Beta Send result to Hiam Tan Southern Calif. Lab			

FORM LAB 803 (REV. 10-79)

VOA

COLLECTED

AN ATTACHMENT TO LAB-804

2/22/85 1000 HRS

SAMPLES FOR CHEMICAL ANALYSIS

LAB NUMBER:

14277

SERIAL NUMBER:

C 21169

WELL NO. 5

ANALYST:

P.H.

DATE REPORTED:

2/22/85

VOA

1. 1,1 Dichloroethylene = 1.1 $\mu\text{g/L}$
2. methylene chloride = 6.2 $\mu\text{g/L}$
3. 1,1 dichloroethane = 1.0 $\mu\text{g/L}$
4. Chloroform = 6.0 $\mu\text{g/L}$
5. Carbon tetrachloride = 8.2 $\mu\text{g/L}$
6. trichloroethylene = 43 $\mu\text{g/L}$
7. Perchloroethylene = 1.2 $\mu\text{g/L}$

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION

DATE 3-12-85 TIME 1300

LAB NO. 10093

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

PURVEYOR AND ADDRESS Santa Fe Springs Co.

COUNTY LA

DATE AND HOUR COLLECTED

3/12/85, 11:45

SAMPLING POINT Well # 6B

SYSTEM NUMBER

COLLECTED BY AAK

BOTTLE CAP NUMBER 04148

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE) ☐ SEWAGE ☐ RAW SURFACE WATER ☒ OTHER (SPECIFY) g/w

SEND REPORT TO:

☐ SEE DIST ☐ COUNTY HD ☒ RWCCS # 4 ☐ NAT'L PARK PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM ☐ FECAL COLIFORM ☐ SPC OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PORTIONS IN ML (LOGS)	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
PRESUMPTIVE TEST	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
CONFIRMED TEST	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
E. C.	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24

RESULTS

COLIFORM/100ml

☒ MPN >24000

☐ MF

FECAL COLIFORM/100ml

☐ MPN

☐ MF

SPC/ml at 35C C12 RES. mg/liter

ANALYST RS

3-14-85

(REV. 9/83) FORM LAB 801 8471-449 12 ST. JEROME CAN. WOODP

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

Date Received

3-12-85

Lab. No.

14459

SAMPLE FOR CHEMICAL ANALYSIS

Purveyor and Address (include city and county)

Santa Fe Springs Co.

System Number

000000

Serial Number

C 21106

Sampling Point

Well # 6B

Collected by

AAK

Date and Hour Collected

3/12/85, 11:40

Type of Sample: ☐ Raw Surface Water ☒ Waste water: ☐ Raw ☐ Chlorinated ☐ Trade Waste ☒ Other ☐ Treated

Send Report To

☐ WSS Dist. # ☐ County HD ☐ DOT Dist. # ☐ National Park Serv. ☒ RWCCS # 4 ☐ Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃)		<input checked="" type="checkbox"/> Other analyses desired (specify):	
<input type="checkbox"/> Ca <input type="checkbox"/> Mg <input type="checkbox"/> Fe Total <input type="checkbox"/> Mn <input type="checkbox"/> Na <input type="checkbox"/> K <input type="checkbox"/> pH <input type="checkbox"/> Total Dissolved Solids	<input type="checkbox"/> Hardness <input type="checkbox"/> HCO ₃ <input type="checkbox"/> CO ₃ <input type="checkbox"/> OH <input type="checkbox"/> Total Alk. <input type="checkbox"/> Cl <input type="checkbox"/> SO ₄ <input type="checkbox"/> F <input type="checkbox"/> NO ₃	Pesticides (group I) 0.55 μ g/l M' DDT 0.20 " H' DDE	
<input type="checkbox"/> Turb. TU <input type="checkbox"/> Spec. Cond. μ mhos/cm		<input type="checkbox"/> NH ₃ -N <input type="checkbox"/> ORG-N <input type="checkbox"/> BOD <input type="checkbox"/> Grease <input type="checkbox"/> Susp. Solids ml/l/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS	

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-12-85	Lab. No. 14461
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern Calif. Chem. Co. Santa Fe Springs		System Number 0000	Serial Number C 21105
Sampling Point Well # 6B		Collected by AAK	Date and Hour Collected 3/12/85, 11:30 AM
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other g/w		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca 23 <input type="checkbox"/> Mg 23 <input type="checkbox"/> Fe Total 0.015 <input type="checkbox"/> Mn 0.015 <input type="checkbox"/> Na 74 <input type="checkbox"/> K 16 <input type="checkbox"/> pH 7.7 <input type="checkbox"/> Total Dissolved Solids 1935 <input type="checkbox"/> Hardness 490 <input type="checkbox"/> HCO ₃ 278 <input type="checkbox"/> CO ₃ 10 <input type="checkbox"/> OH 10 <input type="checkbox"/> Total Alk. 278 <input type="checkbox"/> Cl 182 <input type="checkbox"/> SO ₄ 3105 <input type="checkbox"/> F 0.30 <input type="checkbox"/> NO ₃ 1219		TRACE ELEMENTS <input type="checkbox"/> Al <input checked="" type="checkbox"/> Ag 0.001 <input checked="" type="checkbox"/> As 0.007 <input type="checkbox"/> B <input checked="" type="checkbox"/> Cd <0.001 <input checked="" type="checkbox"/> Cr 0.042 <input checked="" type="checkbox"/> Cu 0.20 <input checked="" type="checkbox"/> Hg 0.006 <input checked="" type="checkbox"/> Pb 0.01 <input checked="" type="checkbox"/> Ni 0.05 <input checked="" type="checkbox"/> Se 0.01 <input checked="" type="checkbox"/> Zn 0.03 <input checked="" type="checkbox"/> B 0.112	<input checked="" type="checkbox"/> Other analyses desired (specify): Hex Cr. None detected. <0.01 mg/l Phenols = 0.001 mg/l al
<input type="checkbox"/> Turb. <input checked="" type="checkbox"/> NH ₃ -N 0.3 <input checked="" type="checkbox"/> Spec. Cond. 1338 <input type="checkbox"/> CRG-N <input type="checkbox"/> BOD <input type="checkbox"/> Susp. Solids <input type="checkbox"/> Grease <input type="checkbox"/> Set Solids ml/l/hour <input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS		Date Reported 3-29-85 Analyst STP MCH	

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section SAMPLE FOR CHEMICAL ANALYSIS		Date Received 3-12-85 (Leave Blank)	Lab. No. 14460
Purveyor and Address (include city and county) Southern Calif Chem Co Santa Fe Springs		System Number [] [] [] [] [] []	Serial Number C 21104
Sampling Point Well # 6B		Collected by AAK	Date and Hour Collected 3/12/85, 11:30
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input checked="" type="checkbox"/> Other <i>g/w</i> <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HO <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWQCB # 4 <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃) <input type="checkbox"/> Ca [] [] [] <input type="checkbox"/> Mg [] [] [] <input type="checkbox"/> Fe Total [] [] [] <input type="checkbox"/> Mn [] [] [] <input type="checkbox"/> Na [] [] [] <input type="checkbox"/> K [] [] [] <input type="checkbox"/> pH [] [] <input type="checkbox"/> Total Dis-solved Solids [] [] [] <input type="checkbox"/> Hardness [] [] [] <input type="checkbox"/> HCO ₃ [] [] [] <input type="checkbox"/> CO ₃ [] [] [] <input type="checkbox"/> OH [] [] [] <input type="checkbox"/> Total Alk. [] [] [] <input type="checkbox"/> Cl [] [] [] <input type="checkbox"/> SO ₄ [] [] [] <input type="checkbox"/> F [] [] <input type="checkbox"/> NO ₃ [] [] []		TRACE ELEMENTS <input type="checkbox"/> Al [] [] [] <input type="checkbox"/> Ag [] [] [] <input type="checkbox"/> As [] [] [] <input type="checkbox"/> B [] [] [] <input type="checkbox"/> Cd [] [] [] <input type="checkbox"/> Cr [] [] [] <input type="checkbox"/> Cu [] [] [] <input type="checkbox"/> Hg [] [] [] <input type="checkbox"/> Pb [] [] [] <input type="checkbox"/> Ni [] [] [] <input type="checkbox"/> Se [] [] [] <input type="checkbox"/> Zn [] [] []	<input checked="" type="checkbox"/> Other analyses desired (specify): V.O.A See attached sheet.
<input type="checkbox"/> Turb. TU [] [] [] <input type="checkbox"/> Spec. Cond. μ mhos/cm [] [] []		<input type="checkbox"/> NH ₃ -N [] [] [] <input type="checkbox"/> ORG-N [] [] []	<input type="checkbox"/> BOD [] [] [] <input type="checkbox"/> Grease [] [] []
<input type="checkbox"/> Suso. Solids [] [] [] <input type="checkbox"/> Set Solids ml/1/hour [] [] []		<input type="checkbox"/> PO ₄ [] [] [] <input type="checkbox"/> MBAS [] [] []	
Date Reported 3-13-85		Analysis P.H.	

Form LAB-800 (2-80)

STATE OF CALIFORNIA - DEPARTMENT OF HEALTH SERVICES SANITATION AND RADIATION LABORATORY SECTION SAMPLE FOR RADIOLOGICAL ANALYSIS		Date Received 3/13/85	Lab No. 5711
Name and Address of Owner or Source Southern Calif Chem Co Santa Fe Springs		Collected By AAK	Serial Number R 33981
Sampling Point Well # 6B		County LA	Date and Time Collected 3/12/85
Type of Sample: <input type="checkbox"/> Air <input type="checkbox"/> Sewage Effluent <input type="checkbox"/> Sewage Sludge <input type="checkbox"/> Milk <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other (Specify) <i>Groundwater</i>			
Sample Size 600	Collection Period (Date and Time)	5.89 \pm 2.35 pcv l Alpha 6.32 \pm 3.04 pcv l Gross Beta	
Air: Finish [] [] [] Start [] [] [] Net [] [] []	Finish [] [] [] Start [] [] [] Net [] [] []	Radium Send report to HAM TAY Southern Calif. Lab.	
Composite Sample: Finish [] [] [] Start [] [] []			

FORM LAB 803 (REV. 10-79)

VOA

COLLECTED

AN ATTACHMENT TO LAB-804

3/12/85

SAMPLES FOR CHEMICAL ANALYSIS

1130 HRS

LAB NUMBER: 14460 WELL #6B

SERIAL NUMBER: C 21104

ANALYST: P.H.

DATE REPORTED: 3/13/85

VOC	
1. Methylene chloride = 24 $\mu\text{g/L}$	15. sec-butyl benzene
2. Petroleum distillate aliphatic hydrocarbons C ₇ - C ₁₄ .	16. Decahydronaphthalene (probable)
3. trichloroethylene = 17 $\mu\text{g/L}$	17. Methyl Indan isomers
4. trimethyl cyclopentane isomers	18. Ethyl Xylene isomers
5. Toluene = 1.6 $\mu\text{g/L}$	19. Dimethyl Indan isomers
6. tetramethyl cyclopentane isomers	20. Decahydro-2-methylnaphthalene
7. Dimethyl cycloheptane isomers	21. tetramethyl benzene isomers
8. trimethyl cycloheptane isomers	22. Diethylmethyl benzene
9. Ethyl-methyl cycloheptane isomers	23. tert-amyl benzene
10. Ethyl benzene = 0.90 $\mu\text{g/L}$	24. trimethyl Indan isomers
11. m,p-Xylenes = 1.2 $\mu\text{g/L}$	
12. o-Xylene = 0.45 $\mu\text{g/L}$	
13. octahydro-2-methylpentalene (probable)	
14. octahydro indene (probable)	

APPENDIX K

RCRA ASSESSMENT/VERIFICATION MONITORING - GROUND WATER ANALYSIS DATA
(SPLIT SAMPLING)

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒
(Explain)

CME Report Pending

RCRA P04628

SCL No. 3857
To 3860

PART I: FIELD SECTION

Collector Attar Khan Date Sampled 3/20/86 Time 1000-230 AM Hours PmActivity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code ☐Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Co. Tel. No. _____Address 8815 Dice Rd. Santa Fe Springs City _____ Zip _____

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3857	300-10	groundwater	MW-10
3858	300-11	"	MW-11
3859	300-4	"	MW-4
3860	300-4A	"	MW-4A

Analysis Requested: GMs - including pH, NH₃-N, Sp. Cond.,
Please send Report to: RWQCB-LA, 107 S. Broadway Rm. 4027
LA 90012 - Attn: Attar Khan
cc to: DOHS - LA TSCD LA, Attn: Baron Peeler

Chain of Custody:

1	<u>Attar Khan</u> Signature	<u>3/2 WRCEgr.</u> Title	<u>3/20/86</u> Inclusive Dates
2	_____ Signature	_____ Title	_____ Inclusive Dates
3	_____ Signature	_____ Title	_____ Inclusive Dates
4	_____ Signature	_____ Title	_____ Inclusive Dates
5	_____ Signature	_____ Title	_____ Inclusive Dates

Special Remarks _____

(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Received By Mary W. Claudge Title PH Chem III Date 3/20/86
 Sample Allocation: ☒ HML ☐ SCBL ☐ LBL ☐ Other _____ Date _____

Analysis Required _____

* Indicate whether sample is sludge, soil, etc.

Orig.—Lab.

Dup.—File

Trip.—Inspector

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory SectionTo : Atkar Khan, RWQCB #4 SCL No. : 3857-3860Sampling No : 300-10, 11, 4, 4A Date of Report: 6/12/86Sample Location: Southern California Chemical Co.
Santa Fe Springs, CAAnalytical Procedures Used: pH - pH meter; Hardness, alkalinity (HCO_3),
Ca, Mg (by difference), chloride - titrimetric
analysis; TDS - gravimetric analysis; Sp Cond. Conductivity
meter; Na, K flame photometer; SO_4 , F, NO_3 - Technicon
Automatic Analyzer; NH_3 -N - distillation and titrimetric analysis

Analysis Results:

SCL No.	3857	3858	3859	3860			
Collector's Sample No.	300-10	300-11	300-4	300-4A			
pH	7.7	7.7	7.5	7.9			
Hardness, mg/l (as CaCO_3)	580	730	1,400	680			
HCO_3 , mg/l (as CaCO_3)	270	220	340	260			
Total alkalinity, mg/l (as CaCO_3)	270	220	340	260			
Total Dissolved Solids, mg/l	7	289	1,400	189			
Spec. Conductance, $\mu\text{mhos/cm}$	1370	1,740	3,440	1,610			
Ca, mg/l	150	200	400	190			
Mg (by difference), "	50	57	110	47			
Na, "	99	110	150	100			
K, "	1.3	2.6	2.6	8.4			"
Cl, "	120	200	710	100			
SO_4 , "	280	360	320	430			
F, "	0.5	0.4	0.4	0.3			
NO_3 , "	<0.1	11	2.2	26			
NH_3 -N, "	<0.7	<0.7	<0.7	<0.7			

Analysts' Signatures:

Michael Ordanick6-12-86

Date

H. Linn6-12-86

Date

V. Motiafar6-12-86

Supervising Chemist's Signature:

Mary W. PlandgeScott J. Nee6/12/86

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒

(Explain)

CME Report Pending

RCRA P04625

SCL No. 3853

To

3856

PART I: FIELD SECTION

Collector Athar Khan Date Sampled 3/20/86 Time 10:00-2:30 HoursActivity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code ☐Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Co. Tel. No. _____Address 8815 Dice Rd. Santa Fe Springs Number Street City Zip

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3853	200-10	groundwater	MW-10
3854	200-11	"	MW-11
3855	200-4	"	MW-4
3856	200-4A	"	MW-4A

Analysis Requested: (HMs) - Cd, Cr, Cu, Hg, Pb, Ni, Ba,Se,Please send report to: RWQCB-LA 1075 Broadway Rm. 4027LA 90012 - Attn: Athar KhanChain of Custody: CC to: DOHS-TSCD LA - Attn: Baron Beeler

1	<u>Athar Khan</u> Signature	<u>WRC Engr.</u> Title	<u>3/20/86</u> Inclusive Dates
2	_____ Signature	_____ Title	_____ Inclusive Dates
3	_____ Signature	_____ Title	_____ Inclusive Dates
4	_____ Signature	_____ Title	_____ Inclusive Dates
5	_____ Signature	_____ Title	_____ Inclusive Dates

Special Remarks _____
(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Received By Mary N. Claudje Title D/H Chemist Date 3/20/86Sample Allocation: ☐ HML ☐ SCBL ☐ LBL ☐ Other

Date _____

Analysis Required _____

*Indicate whether sample is sludge, soil, etc.

Orig.-Lab.

Dup.-File

Trip.-Inspector

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory Section

To : Akbar Khan, RWQCB # SCL No. : 3853-3856
Sampling No : 200-10, 11, 4, 4A Date of Report: 6/14/86
Sample Location: Southern California Chemical Co.
Santa Fe Springs, CA

Analytical Procedures Used: Sample 3853 was digested with HNO_3 for Cu, Ni. The other samples were not digested but were prepared with acid (HCl for Fe, Mn and HNO_3 for the other metals)

Analysis Results: mg/l

SCL No.	3853	3854	3855	3856			
Collector's Sample No.	200-10	200-11	200-4	200-4A			
Cadmium	<0.001	<0.001	0.084	0.001			
Chromium	<0.02	<0.02	71	0.03			
Copper	<0.2	<0.2	<0.2	<0.2			
Mercury	<0.0005	<0.0005	0.002	<0.0005			
Lead	<0.01	<0.01	<0.01	<0.01			
Nickel	<0.2	<0.2	<0.2	<0.2			
Barium	0.2	0.1	0.2	<0.1			
Selenium	<0.01	<0.01	<0.01	<0.01			
Iron	4.3	4.1	1.2	0.6			
Manganese	1.9	2.4	3.7	0.1			

Analysts' Signatures:

JS Hill
nomina Sign

6/12/86
Date
6/12/86
Date

Supervising Chemist's Signature:

Mary W. Claudi
J. Mota Ford 6/12/86

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒

(Explain)

CME Report Pending

SCL No. 3812
To 3816

RCRA PDX625

PART I: FIELD SECTION

Collector Athar Khan Date Sampled 3/17/86 Time 1000-3PMActivity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code ☐Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Company Tel. No. _____Address 8815 Dice Ct. Santa Fe Springs
Number Street City Zip

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3812	300-6	Groundwater	MW-6
3813	300-7	"	MW-7
3814	300-8	"	MW-8
3816	300-7	"	MW-7

Analysis Requested: GMS — including pH, NH₃-N, Sp. Cond.
Please send report to: RWQCB — LA 107 S. Broadway Rm 402
Attn: Athar Khan LA 90012
CC to: DOHS-TSCD LA — Attn: Baron Peeler

Chain of Custody:

1. <u>Athar Khan</u>	<u>WRCEngi.</u>	<u>3/19/86</u>
Signature	Title	Inclusive Dates
2. _____	_____	_____
Signature	Title	Inclusive Dates
3. _____	_____	_____
Signature	Title	Inclusive Dates
4. _____	_____	_____
Signature	Title	Inclusive Dates
5. _____	_____	_____
Signature	Title	Inclusive Dates

Special Remarks _____

(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Received By Marg W Claridge Title PH Chem TD Date 3/19/86
 Sample Allocation: ☒ HML ☐ SCBL ☐ LBL ☐ Other Date _____

Analysis Required _____

*Indicate whether sample is sludge, soil, etc.

Orig.—Lab.

Dup.—File

Trip.—Inspector

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory Section

To : Athar Khan, RWQCB #4 SCL No. : 3812-3814, 3816
Sampling No : 300-6, 7, 8, 9 Date of Report: 6/12/86
Sample Location: Southern California Chemical Co.
Anta Fe Springs et

Analytical Procedures Used: pH - pH meter; Hardness, alkalinity (HCO₃), Ca, Mg (by difference), Chloride - titrimetric analysis; TDS - gravimetric analysis; Sp Cond. - conductivity meter; Na, K - flame photometer; SO₄, F, NO₃ - Technicon Automatic Analyzer; NH₃-N - distillation and titrimetric analysis

Analysis Results:

SCL No.	3812	3813	3814	3816			
Collector's Sample No.	300-6	300-7	300-8	300-9			
pH	7.3	7.4	7.8	7.5			
Hardness, mg/L (as CaCO ₃)	540	760	710	1200			
HCO ₃ , mg/L (as CaCO ₃)	280	350	300	310			
Total Alkalinity, mg/L (as CaCO ₃)	280	350	300	310			
Total Dissolved Solids, mg/L	54	255	126	1210			
Spec. Conductance, μ mhos/cm	1,320	1,880	1,650	2,980			
Ca, mg/L	160	200	180	330			
Mg (by difference), "	36	62	60	100			
Na, "	86	130	88	180			
K, "	3.9	3.9	2.8	3.3			
Cl, "	76	280	210	620			
SO ₄ , "	300	220	260	360			
F, "	0.3	0.4	0.3	0.3			
NO ₃ , "	31	21	16	40			
NH ₃ -N, "	<0.7	1.4	<0.7	<0.7			

Analysts' Signatures:

Monica Linn

Michael Ordanik

K. Linn

6/12/86

Date

6-12-86

Date

6-12-86

Supervising Chemist's Signature:

Merik W. Chardize

Scott Y. Nee

J. Maria Reed

6-12-86

6/12/86

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒

(Explain)

CPI Report Pending

SCL No. 3808

To

3811

RCRA P04625

PART I: FIELD SECTION

Collector Athar A. Khan Date Sampled 3/17/86 Time 1000-3 PM HoursActivity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code ☐Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Company Tel. No. _____Address 8815 Dix Rd Santa Fe Springs Number Street City Zip

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3808	200-6	groundwater	MW-6
3809	200-7	"	MW-7
3810	200-8	"	MW-8
3811	200-9	"	MW-9

Analysis Requested: (HMS) - Cd, Cr, Pb, Hg, Ni, Ba, Se,
 Pl. Send Report to: RWQCB-LA - 107 S. Broadway Rm 4027 LA 90012
 Attn: Athar Khan
 CC to: DOHS-TSCD LA, Attn: Barton Peck.

Chain of Custody:

1	<u>Athar A. Khan</u> Signature	<u>WRCEng.</u> Title	<u>3/19/86</u> Inclusive Dates
2	_____ Signature	_____ Title	_____ Inclusive Dates
3	_____ Signature	_____ Title	_____ Inclusive Dates
4	_____ Signature	_____ Title	_____ Inclusive Dates
5	_____ Signature	_____ Title	_____ Inclusive Dates

Special Remarks

(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Received By Marg W. Clendige Title PH Chemist LA Date 3/19/86
 Sample Allocation: ☐ HML ☐ SCBL ☐ LBL ☐ Other Date _____

Analysis Required _____

* Indicate whether sample is sludge, soil, etc.

Orig - Lab

Dup - File

Trip - Inspector

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory Section

To : Arthur Khan, RWQCB #4 SCL No. : 3808-3811
Sampling No : 200-6, 7, 8, 9 Date of Report: 6/12/86
Sample Location: Southern California Chemical Co.
Santa Fe Springs, CA

Analytical Procedures Used: Samples were prepared with acid
(HNO₃ for metals other than Fe, Mn and HCl for
Fe and Mn)

Analysis Results: <u>mg/l.</u>					
SCL No.	3808	3809	3810	3811	
Collector's Sample No.	200-6	200-7	200-8	200-9	
Cadmium	<0.001	<0.001	<0.001	<0.001	
Chromium	<0.02	<0.02	0.02	<0.02	
Copper	<0.2	<0.2	<0.2	<0.2	
Mercury	<0.0005	<0.0005	<0.0005	<0.0005	
Lead	<0.01	<0.01	<0.01	<0.01	
Nickel	<0.2	<0.2	<0.2	<0.2	
Barium	0.1	0.2	0.1	0.1	
Selenium	<0.01	<0.01	<0.01	<0.01	
Iron	3.3	3.3	0.6	2.1	#
Manganese	0.07	5.2	2.9	3.0	

Analysts' Signatures:

DS Huf
Monica Ligo

6/12/86
Date
6/12/86
Date

Supervising Chemist's Signature:

Mary W. Olanoff
V. M. Ford

6/12/86

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒

(Explain)

Report Pending on RCRA CME

SCL No. 3762
To 3765

RCRA P04625

PART I: FIELD SECTION

Collector Ather Khan Date Sampled 3/18/86 Time 10:30-2:30Activity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code ☐Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Co. Tel. No. _____
Address Dice Road, Santa Fe Springs Number _____ Street _____ City _____ Zip _____

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3762	300-1	ground water	MW-1
3763	300-2	"	MW-2
3764	300-3	"	MW-3
3765	300-5	"	MW-5

Analysis Requested: GMS including PII, NH₃-N, sp. Cond.Please send Report to: EWQCB-LA, 107 S. Broadway Rm 4027
Attn: Ather Khan LA 90012CC: to DOHS-TSCD LA, Attn: Baron Beeler

Chain of Custody:

1.	<u>Ather Khan</u> Signature	<u>WRCEng.</u> Title	<u>3/18/86</u> Inclusive Dates
2.	_____ Signature	_____ Title	_____ Inclusive Dates
3.	_____ Signature	_____ Title	_____ Inclusive Dates
4.	_____ Signature	_____ Title	_____ Inclusive Dates
5.	_____ Signature	_____ Title	_____ Inclusive Dates

Special Remarks

(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Title PH Chem III Received By Mary W Claridge Date 3/18/86
Sample Allocation: ☐ HML ☐ SCBL ☐ LBL ☐ Other

Analysis Required

*Indicate whether sample is sludge, soil, etc.

Orig.—Lab.

Dup.—File

Trip.—Inspector

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory Section

To : Athar Khan, RWPCB#4 SCL No. : 3762-3765
Sampling No : 300-1, 2, 3, 5 Date of Report: 6/12/86
Sample Location: Southern California Chemical Co.
Santa Fe Springs CA

Analytical Procedures Used: pH - pH meter; Hardness, Alkalinity (HCO₃)
Ca, Mg (by difference); Chloride - Titrimetric
analysis; TDS - gravimetric analysis; Sp. Cond. - conductivity
meter; Na-K - flame photometer; SO₄, F, NO₃ - Technicon
Automatic Analyzer; NH₃-N - distillation and titrimetric analysis

Analysis Results:

SCL No.	3762	3763	3764	3765			
Collector's Sample No.	300-1	300-2	300-3	300-5			
pH	7.4	7.8	7.3	7.4			
Hardness, mg/l (as CaCO ₃)	1,200	1,100	690	580			
HCO ₃ , mg/l (as CaCO ₃)	460	270	510	290			
Total Alkalinity, mg/l (as CaCO ₃)	460	270	510	290			
Total Dissolved Solids, mg/l	2180	1870	1210	930			
Sp. Conductance, μ mhos/cm	3060	2550	1570	1320			
Ca, mg/l	270	320	180	170			
Mg (by difference), "	140	83	55	39			
Na, "	220	110	76	79			
K, "	7.8	4.7	3.2	4.1			
Cl, "	680	470	190	67			
SO ₄ , "	320	400	29	300			
F, "	0.3	0.4	0.2	0.3			
NO ₃ , "	16	18	20.1	31			
NH ₃ -N, "	<0.7	<0.7	<0.7	<0.7			

Analysts' Signatures:

K. J.
Mushae Ordanick
V. Moti Faraj

6-12-86
Date
6-12-86
Date
6-12-86

Supervising Chemist's Signature:

Mary W. Claudge
Scott Y. Nee 6/12/86

HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST

PRIORITY ☒

(Explain)

Report Pending on RCRA CME

SCL No. 3758

To

3761

RCRA P04625

PART I: FIELD SECTION

Collector Athar Khan Date Sampled 3/18/86 Time 10:30-2:30 HoursActivity: ☐ Enforcement ☐ ASP ☐ H.W. Property ☐ Super ☐ Other ☒ RCRA OPT Code Region: ☐ PMS-SAC ☐ NCS-SAC ☐ NCS-FRESNO ☒ SCS-LA ☐ NCCS-BERK

LOCATION OF SAMPLING:

Name Southern Calif. Chemical Co. Tel. No. Address Dice Road, Santa Fe Springs City Zip

SCL No. (Lab Only)	Collector's Sample No.	Type Of Sample*	FIELD INFORMATION
3758	200-1	groundwater	MW-1
3759	200-2	"	MW-2
3760	200-3	"	MW-3
3761	200-5	"	MW-5

Analysis Requested: (HMs) - Cd, Cr, Cu, Hg, Pb, Ni, Ba, SePlease Send Report to: RWQCB-LA, 107 S. Broadway, Rm #027, LA 90012
Attn: Athar Khan

Chain of Custody:

CC: to DOHS - TSCD LA, Attn: Baron Peeler

1	<u>Athar Khan</u> Signature	<u>WRCEng.</u> Title	<u>3/18/86</u> Inclusive Dates
2	<u></u> Signature	<u></u> Title	<u></u> Inclusive Dates
3	<u></u> Signature	<u></u> Title	<u></u> Inclusive Dates
4	<u></u> Signature	<u></u> Title	<u></u> Inclusive Dates
5	<u></u> Signature	<u></u> Title	<u></u> Inclusive Dates

Special Remarks

(e.g., duplicate sample given to company, etc.)

PART II: LABORATORY SECTION

Received By Marg W. Plandige Title PA Chem III Date 3/18/86Sample Allocation: ☐ HML ☐ SCBL ☐ LBL ☐ Other Date Analysis Required

*Indicate whether sample is sludge, soil, etc.

LABORATORY REPORT

Hazardous Materials Unit
Southern California Laboratory Section

To : Athar Khan, RWD CB #4 SCL No. : 3758-3761
Sampling No. : 200-1, 2, 3, 5 Date of Report: 6/12/86
Sample Location: Southern California Chemical Co.
Santa Fe Springs, CA

Analytical Procedures Used: Sample 3758 was digested (with HNO₃) for all metal except iron and manganese; The other samples were preserved with acid but not digested. (H₂O₂ for Fe-Mn and HNO₃ for other metals)

Analysis Results: mg/l

SCL No.	3758	3759	3760	3761			
Collector's Sample No.	200-1	200-2	200-3	200-5			
Cadmium	0.002	<0.001	<0.001	<0.001			
Chromium	1.1	<0.02	<0.02	<0.02			
Copper	1.6	<0.2	<0.2	<0.2			
Mercury	0.002	<0.0005	<0.0005	<0.0005			
Lead	0.05	<0.01	<0.01	<0.01			
Nickel	0.6	<0.2	<0.2	<0.2			
Barium	2.6	0.2	0.3	<0.1			
Selenium	<0.01	<0.01	<0.01	<0.01			
Iron *	7.4	6.3	2.2	1.0			
Manganese *	3.9	0.8	5.0	0.1			
Iron and Manganese for this set were taken from bottles for General Metals marked 3762-3765 (300-1, 2, 3, 5)							

Analysts' Signatures:

P. S. Huh
Dorinda L. Jones

6/12/86
Date
6/12/86
Date

Supervising Chemist's Signature:

Mary W. Claugie
V. Motia Faraj

6/12/86

TABLE C

* WATER ANALYSIS PERFORMED

<u>Drinking Water Parameters</u>	<u>Parameters Establishing Groundwater Quality</u>	<u>Parameters Indicating Groundwater Contamination*</u>
Arsenic	Chloride	**pH
Borium	Iron	**Specific Conductance
**Cadmium	Manganese	**TOC
**Chromium	Phenols	**TOX
Fluoride	Sodium	
Lead	Sulfate	
Mercury		
**Nitrate		
Selenium		
Silver		
Endrin		
Lindane		
Methoxyphlor		
Toxaphene		
2,4-D		
2,4,5-TP Silver		
Rodium		
Gross Alpha		
Coliform Bacteria		

Additional Analysis as required by DOHS & RWQCB

Ammonia
Sulfides
Hexavalent Chrome
Nickel
Zinc

NOTES: * = Groundwater indicator parameters performed in quads
 ** = Water analysis performed in Phase II study.

CHAIN OF CUSTODY RECEIPT

SAMPLERS: (Signature)

Randolph C. Harris

Phone:

213/638.9344

SHIP TO:

*Brown & CALDWELL
Pasadena*

ATTENTION:

Phone No.

SHIPPING INFORMATION

Shipper

B & C COURIER P/U

Address

Date Shipped

Shipment Service

Airbill No.

Cooler No.

Relinquished by: (Signature)

Randolph C. Harris

Received by: (Signature)

Kean McPhee

Date/Time

2-25/12:11

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Received by: (Signature)

Date/Time

Relinquished by: (Signature)

Receive for laboratory by: (Signature)

Date/Time

*Analysis laboratory should complete, "sample condition upon receipt", section below, sign and return top copy to J. H. KLEINFELDER & ASSOCIATES, 15303 Ventura Blvd., Suite 700, Sherman Oaks, CA 91403-3156.

Sample Number	Site Identification	Date Sampled	Analysis Requested	Sample Condition Upon Receipt
<i>00-01</i>	<i>Q1014</i>	<i>22 Feb</i>	<i>TOX</i>	
<i>-00-02</i>			<i>TOC</i>	
<i>-00-03</i>			<i>METALS</i>	
<i>020</i>			<i>pesticides</i>	
<i>021</i>			<i>Phenol</i>	
<i>022</i>			<i>INORGANICS</i>	
<i>023</i>			<i>pH 4</i>	
<i>024</i>				
<i>025</i>				
<i>026</i>				
<i>027</i>				
<i>027</i>			<i>conductivity 4</i>	
<i>028</i>				
<i>029</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	

INSTRUCTIONS: Laboratory reports should reference and be billed by site ID# and contain the following:

- summary of analytical methodology and QA work (blanks, spikes, duplicates)
- dates for (a) sampling, (b) lab receipt, (c) extraction, (d) injection/analysis
- detection limits for all constituents analyzed for and reporting of all constituents detected which were not specifically designated

APPENDIX L

REGIONAL BOARD STAFF COMMENTS AND RECOMMENDATIONS TO DOHS ON RCRA POND
CLOSURE PLAN AND REPORT ON HYDROGEOLOGIC ASSESSMENT OF THE POND

Memorandum

To : Mr. John Hinton
Department of Health Services
Toxic Substances Control Division
107 South Broadway, Room 7011
Los Angeles, CA 90012

Date : March 13, 1986

File : RCRA EPA
ID# CAD008488025

From : CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD — LOS ANGELES REGION
107 South Broadway, Room 4027, Los Angeles, CA 90012-4596
Telephone: ATSS 640-4460 : (213) 620-4460

Subject: SOUTHERN CALIFORNIA CHEMICAL COMPANY (SCCC)
SANTA FE SPRINGS - RCRA POND CLOSURE PLAN

Reference is made to the RCRA regulated pond closure plan submitted by the subject company on July 30, 1985. Reference is also made to a final report entitled "Hydrogeologic Assessment of Pond Number 1, Southern California Chemical Company, Santa Fe Springs, California" prepared by SCCC's Consultants, J. H. Kleinfelder & Associates; submitted October 24, 1985. We have reviewed the plan and the report with respect to the applicable closure and post-closure requirements of 40 CFR 265 Subpart G, Subsection 265.111 including 40 CFR 265.228 (closure and post-closure requirements for surface impoundments).

Our comments and recommendations regarding the company's closure plan are also related to the hydrogeologic assessment report of pond 1. The following are our comments and recommendations:

1. The closure plan was submitted for agency review and comments on July 30, 1985, and the pond was removed from service in August 1985, by implementing the closure plan without prior approval from the lead agencies (Regional Board, EPA and Department of Health Services). Since the closure was conducted and completed without an approved closure plan, proper closure pursuant to 40 CFR 265 standards is questionable because the plan itself is inadequate.
2. Southern California Chemical Company must submit and meet with the certification requirements pursuant to 40 CFR Subpart G, Subsection 265.115 regulations that the facility has been closed in accordance with the specifications of an approved closure plan. This closure certification must be prepared by an independent registered professional engineer.
3. The closure plan gives information about removal of standing liquid, sludges and residue from the pond. No information is provided however, about the removal or mitigation of the contaminated soil beneath the pond to comply with the closure performance standards pursuant to 40 CFR 265 Subpart G, Subsection 265.111.

Mr. John Hinton
Page 2

4. Detection monitoring from the facility's RCRA groundwater monitoring program revealed high levels of ground water contamination especially in Well MW-4, down gradient to the subject RCRA regulated pond, during 1984 and 1985. The ground water monitoring results during the hydrogeologic assessment of Pond 1 area also have shown and confirmed this ground water contamination caused by Pond 1. We question the finding of the assessment report, that, "Based on the chemical data...there is no evidence that leakage of Pond 1 has occurred...". In view of the historical use of the pond, past house-keeping practices, sewer leaks, past landfarming practices and hydrogeologic conditions at the site, it is suspected that the Pond 1 is also among the identified sources as a potential contributor to the soil and ground water contamination in MW-4 and elsewhere.

A revised closure plan addressing the above-mentioned comments with a post-closure monitoring program along with a recommended remedial action plan (including a time schedule for implementation) must be submitted for our review and approval. Additional comments may be made subsequent to that review.

If you have any questions, please call Athar Khan at (213) 620-5439.



RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

AAK/pml

cc: Mr. John Adams, State Water Resources Control Board
Mr. Bill Wilson, Environmental Protection Agency, Region 9



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

215 Fremont Street
San Francisco, Ca. 94105

2 MAR 1986

Jonathan S. Leo
Heller, Ehrman, White & McAuliffe
44 Montgomery St.
San Francisco, CA 94104

Re: Southern California Chemical Co. (CAD008488025)

Dear Mr. Leo:

This will confirm the substance of your letter of March 18, 1986 regarding closure of Pond No. 1 at the above-referenced facility (SCC). In summary:

1. EPA will not take a position at this time on the need for post-closure care for Pond No. 1, pending complete analysis of the source of ground water contamination at SCC. Until this analysis is completed, SCC must maintain its interim status ground water monitoring network.

2. SCC is not precluded from installation of a RCRA-exempt wastewater treatment system in Pond No. 1, subject to DOHS approval. SCC is cognizant of the fact that removal of the wastewater tanks may be required should future closure or remedial activities be necessary.

By copy of this letter, I am conveying our position to SCC and other regulatory agencies.

Sincerely,

William D. Wilson
Chief, Permits Section

cc: Tere King, SCC
John Hinton, DOHS Los Angeles
Hank Yacoub, Los Angeles RWQCB

2. Location of Old Tank:

As per conclusion 5 and 6 of hydrogeologic report, page 16, which states that, "the elevated levels of chrome and copper detected under the pond appear to have been due to leakage from an old tank area, and waste from the old tank area migrated vertically through the vadose zone to the base of the 30 foot sand and laterally under the pond", we question these conclusions for the reason that neither the exact location of the old tank area nor any supporting data has been provided in the report. In this regards reference is also made to a telephone conversation on May 2, 1986, between Mr. Ken Durand of Kleinfelder and Associates and Athar Khan of this Board's staff in which Mr. Durand stated that the exact location of the old tank was never determined and there is no record or any other information available on the old tank farm.

3. Structural Integrity of the Pond 1 Concrete Base:

The Regional Board staff question the determination made in the first paragraph of page 9 of the assessment report which states, "... after the pond was drained and cleaned, there was no visible signs of leakage, or chemical degradation of the concrete ...". On the contrary, several cracks in the concrete base of the pond are still clearly visible and these cracks were observed and photographed during our Joint RCRA CME facility inspection on March 25, 1986, (enclosed are copies of the photographs of the concrete pond bottom) clearly showing the cracks through which the wastewater may have leaked into the ground water.

Based on the above, Regional Board staff feels that the review comments made in our memo dated March 13, 1986, are valid and there is no justification to absolutely rule out the possibility of pond 1 as a contributor to the contamination of ground water, particularly in MW-4 downgradient from the pond. It is difficult to quantify or measure the significance of pond 1 contribution to the soil or ground water contamination at this site. However, we agree with your determination that any contamination below pond 1 will be addressed under a comprehensive remedial investigation of the entire site for optimum cleanup, as necessary.

Finally, the purpose of the monitoring program cited in our March 13, 1986, memo is required to evaluate the effectiveness of the current and future cleanup activities to be implemented at this site. This should not be construed as RCRA post-closure monitoring requirements.

Mr. John Hinton
Page 3

We hope this will clarify our position on the issues addressed above.
Should you or your staff have any further questions please call Athar Khan
at (213) 620-5439.



RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

AAK:gw

cc: Mr. John Adams, State Water Resources Control Board, Division of Water
Quality
Mr. John Masterman, Department of Health Services, Sacramento
Mr. William Wilson, Environmental Protection Agency, Region 9
Ms. Tere King, Southern California Chemical Company

Enclosure

San Juan Canyon Tunnel e. Santa Fe

CAD008488025



→ Concrete base of pond 1, cracks in the concrete are visible.
photo taken on 3/25/86.



Photographs taken by Chuck Stultz of DCHS during DCHS RR CME

Memorandum

To : Raymond K. Delacourt
Senior Water Resource
Control Engineer
California Regional Water Quality
Control Board - Los Angeles Region
107 S. Broadway, Room 4027
Los Angeles, CA 90012

Date : April 9, 1986

Subject: File: RCRA EPA
ID# CAD008488025
Southern California Chemical Co.
Santa Fe Springs - RCRA Pond
Closure Plan

From : Facility Permitting Unit
Southern California Section
Toxic Substances Control Division
107 S. Broadway, Room 7011
Los Angeles, CA 90012

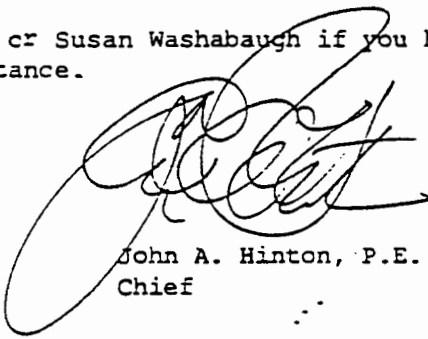
We thank you for your comments of March 13, 1986 concerning the above project.

Based on our review of the document titled "Hydrogeologic Assessment of Pond Number 1 . . ." we reached the decision that there is a lack of evidence confirming that Pond 1 had contributed significantly to the soil and ground water contamination. The evidence that was presented in the report suggested that the soil and ground water contamination was due to poor past house-keeping practices and a leaking underground tank which had been removed.

We believe that Pond 1 was not a significant source of contamination and that any contamination below Pond 1 will be addressed under a more comprehensive remedial investigation of the entire site. These two reasons have caused us to decide against Post Closure. Your staff has already been briefed on this discussion.

We are in need of clarification of your Comment #4. We appreciate the Water Board's history with SCCC, and we request that you elaborate on the evidence that confirms " . . . ground water contamination caused by Pond 1 . . .".

Please contact either Mark Vest or Susan Washabaugh if you have any questions. Again, thank you for your assistance.



John A. Hinton, P.E.
Chief

JAH:SW:mf

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

107 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460



March 27, 1986

Ms. Tere King
Manager Environmental Affairs
Southern California Chemical Company, Inc.
8851 Dice Road
Santa Fe Springs, California 90670

ENVIRONMENTAL ASSESSMENT REPORT, SOUTHERN CALIFORNIA CHEMICAL COMPANY, INC.
(EPA I.D. #CAD008488025)

Reference is made to the subject report entitled, "Environmental Assessment; Southern California Chemical Company, Inc.; Santa Fe Springs, California" received in our office on March 14, 1986.

We will review this document and submit any comments we may have to DOHS.

Please note that our comments on your company's July 30, 1985, Closure Plan submittal and a final report entitled, "Hydrogeologic Assessment of Pond Number 1, Southern California Chemical Company, Santa Fe Springs, California" submitted October 24, 1985, were transmitted to State Department of Health Services on March 13, 1986.

If you have any questions, please call Athar Khan of this office at (213) 620-5439.

RAYMOND K. DELACOURT
Senior Water Resource
Control Engineer

AAK:gw

cc: Mr. John Hinton, Department of Health Services, Toxic Substances
Control Division
Mr. John Adams, State Water Resources Control Board, Division of water
quality
Mr. Bill Wilson, Environmental Protection Agency, Region 9
Mr. Jonathan S. Leo - Heller, Ehrman, White & McAuliffe

Memorandum

To : Mr. John Hinton
Department of Health Services
Toxic Substances Control Division
107 South Broadway, Room 7011
Los Angeles, CA 90012

Date : May 16, 1986

File : RCRA EPA I.D.#
CAD008488025

From : CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD — LOS ANGELES REGION
107 South Broadway, Room 4027, Los Angeles, CA 90012-4596
Telephone: ATSS 640-4460 : (213) 620-4460

Subject: SOUTHERN CALIFORNIA CHEMICAL COMPANY (SCCC) SANTA FE SPRINGS - RCRA POND
CLOSURE

Reference is made to your memo dated April 9, 1986, concerning the closure of RCRA regulated Pond Number 1 and our review comments and recommendations made to you in a memo regarding a final report entitled, "Hydrogeologic Assessment of Pond 1, Southern California Chemical Company, Santa Fe Springs, California".

Your memo requested clarification of comment #4 in our March 13 1986, memo to you. The following is the additional information with the enclosed supporting documents justifying our concern regarding soil and ground water contaminated at the subject facility:

1. Historic Use of Pond 1 vs. Ground Water Contamination and Past Housekeeping:

The Company's waste disposal record indicates that during the entire life of the subject pond, waste streams containing chromium, copper and organics were discharged to the pond on a regular basis (See enclosed table B and plate 17), and waste sludges containing iron, copper, chrome, and other metals were periodically removed from the pond bottom (See enclosed hazardous waste manifest). The high levels of chromium, copper and organics that were detected in the soil samples and the ground water monitoring well MW-4, downgradient from the pond (See enclosed water and soil analysis data) confirms this Regional Board staff's determination that among the other identified suspected sources, Pond 1 was also a potential suspected source of pollution.

Regarding the company's past housekeeping, our files are full of documentations regarding accidental spills and improper disposal practices at the subject site. In this regards, several notices of violations, and citations including a Cleanup and Abatement Order were issued to the company (See enclosed list of citations/notice of violations) by different regulatory agencies.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

107 SOUTH BROADWAY, SUITE 4027
LOS ANGELES, CALIFORNIA 90012-4596
(213) 620-4460



May 18, 1984

Reading
83-8

Southern California Chemical Co., Inc.
8851 Dice Road
Santa Fe Springs, CA 90670

Attn: Ms. Tere King, Manager
Environmental Affairs

RE: Interim Status Document
(ISD) Monitoring (CAD008488025)

Dear Ms. King:

According to your Interim Status Document (ISD) issued by the Department of Health Services you were required to install wells and monitor groundwater around your hazardous waste storage ponds. Section 4 of the Groundwater Monitoring Section of the ISD requires quarterly reporting of monitoring data to the Regional Board. In addition, if the monitoring data indicates a significant increase in constituent levels (or pH decrease) between the monitoring and background wells you are required to notify the Regional Board and implement a groundwater assessment program.

To date we have not received any monitoring data from you for the above groundwater monitoring program. You are hereby requested to submit to this Regional Board by June 1, 1984, the following information.

- (1) Monitoring Well Information
 - a. location of wells in relationship to facility units;
 - b. well construction and development methods;
 - c. well logs;
 - d. perforated intervals
- (2) Details of the sampling and analysis plan required in Section 2(a) of the Groundwater Monitoring Section of your ISD.
- (3) All data collected including replicates.
- (4) Statistical analysis of all data as required in Section 3(b) of the ISD Groundwater Section.

- (5) The outline of the groundwater quality assessment program required by Section 3(a) of the ISD Groundwater Monitoring Section.
- (6) Any additional notifications or monitoring data required by the ISD Groundwater Monitoring Section as a result of data collected in (3) and (4) above.

If you are required pursuant to your ISD to implement unsaturated zone monitoring you are hereby requested to submit to this Regional Board by June 1, 1984 the following information:

- (1) The unsaturated zone monitoring plan and rationale for its development.
- (2) Results of all analyses, including background data, collected from the unsaturated zone monitoring system.

If you have not implemented the ISD required groundwater or unsaturated zone monitoring please respond by May 25, 1984. This response shall include a detailed explanation as to your failure to implement the required monitoring. If, according to the ISD or the Resource Conservation and Recovery Act you are still required to implement groundwater or unsaturated zone monitoring your response shall include a detailed time schedule for implementation of the required monitoring.

If you have any questions concerning this matter, please contact Hank Yacoub or John Lewis at the above telephone number.

Very truly yours,

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

cc: Department of Health Services, Toxic Substances Control Division, Los Angeles
Attn: John Hinton
State Water Resources Control Board, Division of Technical Services
Attn: Ed Anton
Attn: Fred Lercari
Environmental Protection Agency, Region 9, Attn: Mr. Phil Bobel
Philipp Brothers Chemicals, Inc., Attn: Mr. Vinny Krajewski, Environmental Engi
City of Santa Fe Springs
Los Angeles County Engineer-Facilities
Attn: Carl Sjoberg

JLL:mp



SOUTHERN CALIFORNIA CHEMICAL CO., INC.

MANUFACTURING CHEMISTS

HOME OFFICE: 8851 DICE ROAD • SANTA FE SPRINGS, CALIF. 90670-0118 • TELEX 69-8247

May 10, 1985

Certified Mail -
Return Receipt Requested

U.S. Environmental Protection
Agency Region IX
215 Fremont Street
San Francisco, California 94105

Attention: Mr. Jim Levy, Permit Writer

Gentlemen:

Please be advised that this letter is to provide notification as required pursuant to 40 CFR 265.93 (d)(1). We have been doing hydrogeological studies of our facility under the direction of the California Regional Water Quality Control Board - Los Angeles Region and have discovered levels of inorganic contamination above drinking-water standards. Due to pH and absence of various other contaminants, we do not believe that this is a result of any current activities. It may be due to a past underground tank that contained this material approximately 15 years ago and was located in fairly close proximity to the area in which the problem was discovered. We have been informed that the tank was removed at about that time.

Neither of the two downgradient wells, nor any of the other four wells around the perimeter of our 1.8-acre facility, shows any contamination due to any of our past or present activities.

We intend further action, including full compliance with the requirements of 40 CFR 265.93 (d); development and submittal of further specific plans will be forwarded within 15 days, with concurrent implementation.

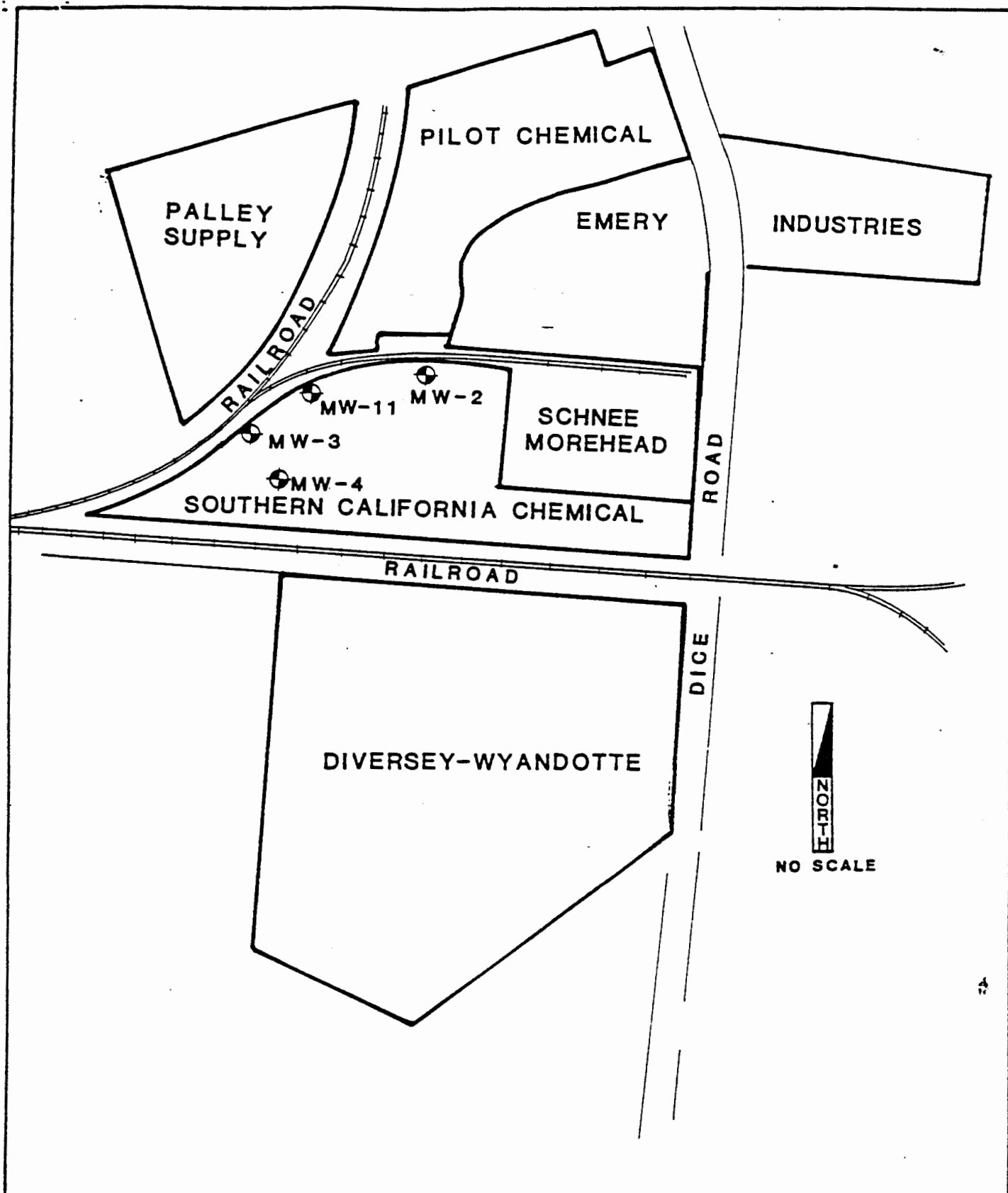
Please advise if any further action on our part is needed.

Very truly yours,

(Ms.) Tere King
Manager, Environmental Affairs

TK:ls

cc: Mr. Athar Kahn
California Regional Water Quality
Control Board - Los Angeles Region
Mr. Kenneth L. Durand
J.H. Kleinfelder & Associates
Mr. Peter H. Weiner



J.H. KLEINFELDER & ASSOCIATES
 GEOTECHNICAL & GROUNDWATER CONSULTANTS



SOUTHERN CALIFORNIA CHEMICAL CO., INC.
 SANTA FE SPRINGS, CA.

PLATE

LOCATION MAP

Project Number 21014-3 JUNE 1986

ANNUAL RCRA GROUNDWATER MONITORING
INSPECTION AND EVALUATION REPORT
REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

FACILITY: Southern California Chemical Co., Inc.
8851 Dice Road
Sante Fe Springs, California
90670-0118

EPA ID NO: CAD008488025

Date of Inspection: April 22, 1985

Facility Representative: Tere King

RWQCB Inspector: Frank Mele

I. PURPOSE:

This report is a summary of the annual ISD groundwater compliance and evaluation at Southern California Chemical Co., Inc. in Santa Fe Springs, California. Compliance was evaluated by a review of existing data, site inspection, and analysis of groundwater samples. The evaluation was completed by Regional Board staff on April 22, 1985.

II. INTRODUCTION AND SITE HYDROGEOLOGY:

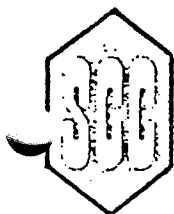
Southern California Chemical is a manufacturing facility for ferric chlorides, copper oxides, and copper sulfate. The facility also produces ammonia etchants and chromic sulfuric acid etchants to etch copper from printed circuit boards. The company has been in business at the present location in Santa Fe Springs since 1958. The facility contains one wastewater storage and treatment impoundment and two underground petroleum fuel storage tanks and is currently under RCRA groundwater monitoring requirements. A groundwater monitoring plan was submitted to Board staff on November 28, 1984. The plan was revised after review by board staff and now incorporates six groundwater monitoring wells. Well construction and development was completed in February 1985. Sampling of all the wells by Board staff and Southern California Chemical Company's consultant was completed in March 1985.

Southern California Chemical Company's Santa Fe Springs facility is located in the Santa Fe Springs Plain Area of the coastal plain of Los Angeles County, California. The site area is located on surface exposure of the Bellflower Aquiclude, a low permeability portion of the Lakewood Formation. This late Pliocene alluvial formation is approximately 20 to 25 feet thick at this location.

Underlying this, is approximately 30 to 35 feet of the Gage Aquifer, which is the lowest formation in this area of the Lakewood Formation. The San Pedro Formation underlies the Lakewood in this area and extends to a depth of over 900 feet below the ground surface. The first groundwater is approximately 45 to 50 feet below the surface and has a southwest gradient.

III. OVERVIEW AND EVALUATION:

In April 1985, the results of the initial groundwater sampling indicated that hazardous waste constituents have entered the ground water. at the present time, the engineering consultant for the facility, Kleinfelder & Associates, has contacted the Board staff and confirmed the contamination with their own test results. (Please refer to the site plan.) Of particular concern are the high levels of heavy metals, volatile organics, and coliforms. Well #4, adjacent to two surface ponds, recorded the highest levels of contamination. The facility showed high coliform levels, particularly in Well #6. As shown by the gradients on the groundwater contour map, possible impaction of the deep aquifer may exist. Kleinfelder & Associates have informed the Board staff that a mitigation plan is currently being prepared. The Department of Health Services and the EPA have been notified of the monitoring test results. Southern California Chemical Company has been notified to implement 40CFR 265 requirements. In a letter dated May 10, 1985, (copy attached) the company has notified EPA about their groundwater contamination pursuant to 40CFR 265.93(d)(1) regulations. An assessment plan pursuant to the 40CFR265.93(d) requirement is currently being prepared and will be submitted soon.



SOUTHERN CALIFORNIA CHEMICAL CO., INC.

MANUFACTURING CHEMISTS

HOME OFFICE: 8851 DICE ROAD • SANTA FE SPRINGS, CALIF. 90670-0118 • TELEX 69-8247

May 10, 1985

Certified Mail -
Return Receipt Requested

U.S. Environmental Protection
Agency Region IX
215 Fremont Street
San Francisco, California 94105

Attention: Mr. Jim Levy, Permit Writer

Gentlemen:

Please be advised that this letter is to provide notification as required pursuant to 40 CFR 265.93 (d)(1). We have been doing hydrogeological studies of our facility under the direction of the California Regional Water Quality Control Board - Los Angeles Region and have discovered levels of inorganic contamination above drinking-water standards. Due to pH and absence of various other contaminants, we do not believe that this is a result of any current activities. It may be due to a past underground tank that contained this material approximately 15 years ago and was located in fairly close proximity to the area in which the problem was discovered. We have been informed that the tank was removed at about that time.

Neither of the two downgradient wells, nor any of the other four wells around the perimeter of our 1.8-acre facility, shows any contamination due to any of our past or present activities.

We intend further action, including full compliance with the requirements of 40 CFR 265.93 (d); development and submittal of further specific plans will be forwarded within 15 days, with concurrent implementation.

Please advise if any further action on our part is needed.

Very truly yours,

Tere King

(Ms.) Tere King
Manager, Environmental Affairs

TK:ls

cc: Mr. Athar Kahn

California Regional Water Quality
Control Board - Los Angeles Region
Mr. Kenneth L. Durand
J.H. Kleinfelder & Associates
Mr. Peter H. Weiner

APPENDIX A-1

FACILITY INSPECTION FORM FOR COMPLIANCE WITH INTERIM
STATUS STANDARDS COVERING GROUND-WATER MONITORING

Company Name: Southern California ; EPA I.D. Number: CAD008488025
Chemical Company
Company Address: 8851 Dice Road ; Inspector's Name: Frank Mele P.E.
Sante Fe Springs, CA
90670

Company Contact/Official: Tere King ; Branch/Organization: So. CA Chem
Title: Manager Environmental Affairs ; Date of Inspection: April 22, 1985

Type of facility: (check appropriately)	<u>Yes</u>	<u>No</u>	<u>Unknown</u>	<u>Waived</u>
a) surface impoundment	<u>X</u>	<u> </u>		
b) landfill	<u> </u>	<u> </u>		
c) land treatment facility	<u> </u>	<u> </u>		
d) disposal waste pile*	<u> </u>	<u> </u>		

Ground-Water Monitoring Program

1. Was the ground-water monitoring program reviewed prior to site visit?
If "No",

X

- a) Was the ground-water program reviewed at the facility prior to site inspection?

2. Has a ground-water monitoring program (capable of determining the facility's impact on the quality of groundwater in the uppermost aquifer underlying the facility) been implemented? 265.90(a)

X

*Listed separate from landfill for convenience of identification.

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>	<u>Waived</u>
3. Has at least one monitoring well been installed in the uppermost aquifer hydraulically upgradient from the limit of the waste management area? 265.91(a)(1)	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
a) Are ground-water samples from the uppermost aquifer, representative of background ground-water quality and not affected by the facility (as ensured by proper well number, locations and depths?)	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
4. Have at least three monitoring wells been installed hydraulically downgradient at the limit of the waste handling or management area? 265.91(a)(2)	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
a) Do well number, locations and depths ensure prompt detection of any statistically significant amounts of HW or HW constituents that migrate from the waste management area to the uppermost aquifer?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
5. Have the locations of the waste management areas been verified to conform with information in the ground-water program?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
a) If the facility contains multiple waste management components, is each component adequately monitored?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
6. Do the numbers, locations, and depths of the ground-water monitoring wells agree with the data in the ground-water monitoring system program? If "No", explain discrepancies.	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
7. Well completion details. 265.91(c)				
a) Are wells properly cased?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
b) Are wells screened (perforated) and packed where necessary to enable sampling at appropriate depths?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>
c) Are annular spaces properly sealed to prevent contamination of ground-water?	<u>x</u>	<u> </u>	<u> </u>	<u> </u>

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
8. Has a ground-water sampling and analysis plan been developed? 265.92(a)	<u>X</u>		
a) Has it been followed?	<u>X</u>		
b) Is the plan kept at the facility?	<u>X</u>		
c) Does the plan include procedures and techniques for:			
1) Sample collection?	<u>X</u>		
2) Sample preservation?	<u>X</u>		
3) Sample shipment?	<u>X</u>		
4) Analytical procedures?	<u>X</u>		
5) Chain of custody control?	<u>X</u>		
9. Are the required parameters in ground-water samples being tested quarterly for the first year? 265.92(b) and 265.92 (c)(1)	<u>X</u>		
a) Are the ground-water samples analyzed for the following:			
1) Parameters characterizing the suitability of the ground-water as a drinking water supply? 265.92(b)(1)	<u>X</u>		
2) Parameters establishing ground-water quality? 265.92(b)(2)	<u>X</u>		
3) Parameters used as indicators of ground-water contamination? 265.92(b)(3)	<u>X</u>		
(i) For each indicator parameter are at least four replicate measurements obtained at each upgradient well for each sample obtained during the first year of monitoring? 265.92(c)(2)	<u>X</u>		
(ii) Are provisions made to calculate the initial background arithmetic mean and variance of the respective parameter concentrations or values obtained from the upgradient well(s) during the first year? 265.92(c)(2)	<u>X</u>		
b) For facilities which have completed first year ground-water sampling and analysis requirements:			
1) Have samples been obtained and analyzed for the ground-water quality parameters at least annually? 265.92(d)(1)	<u>X</u>		
2) Have samples been obtained and analyzed for the indicators of ground-water contamination at least semi-annually? 265.92(d)(2)	<u>X</u>		

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
c) Were ground-water surface elevations determined at each monitoring well each time a sample was taken? 265.92(e)	<u> X </u>	<u> </u>	
d) Were the ground-water surface elevations evaluated annually to determine whether the monitoring wells are properly placed? 265.93(f)	<u> X </u>	<u> </u>	
e) If it was determined that modification of the number, location or depth of monitoring wells was necessary, was the system brought into compliance with 265.91(a)? 265.93(f)	<u> N/A </u>	<u> </u>	
10. Has an outline of a ground-water quality assessment program been prepared? 265.93(a)*	<u> X </u>	<u> </u>	
a) Does it describe a program capable of determining:	The initial monitoring plan is in effect and the first samples have been analyzed.		
1) Whether hazardous waste or hazardous waste constituents have entered the ground water?	<u> X </u>	<u> </u>	
2) The rate and extent of migration of hazardous waste or hazardous waste constituents in ground water?	<u> </u>	<u> X </u>	
3) Concentrations of hazardous waste or hazardous waste constituents in ground water?	<u> X </u>	<u> </u>	
b) After the first year of monitoring, ** have at least four replicate measurements of each indicator parameter been obtained for samples taken for each well? 265.93(b)	<u> N/A </u>	** System has only been in effect 2 months.	
1) Were the results compared with the initial background means from the upgradient well(s) determined during the first year?	<u> </u>	<u> </u>	
(i) Was each well considered individually?	<u> </u>	<u> </u>	
(ii) Was the Student's t-test used (at the 0.01 level of significance)?	<u> </u>	<u> </u>	
2) Was a significant increase (or pH decrease as well) found in the:			
(i) Upgradient wells	<u> </u>	<u> </u>	
(ii) Downgradient wells	<u> </u>	<u> </u>	
If "Yes", Compliance Checklist A-2 must also be completed.			

	<u>Yes</u>	<u>No</u>	<u>Unknown</u>
11. Have records been kept of analyses for parameters in 265.92(c) and (d)? 265.94(a)(1)	<u>x</u>	<u> </u>	<u> </u>
12. Have records been kept of ground-water surface elevations taken at the time of sampling for each well? 265.94(a)(1)	<u>x</u>	<u> </u>	<u> </u>
13. Have records been kept of required elevations in 265.93(b)? 265.94(a)(1)	<u>x</u>	<u> </u>	<u> </u>
14. Have the following been submitted to the Regional Administrator 265.94(a)(2) :*	SEE COMMENTS BELOW		
a) Initial background concentrations of parameters listed in 265.92(b) within 15 days after completing each quarterly analysis required during the first year?	<u>x</u>	<u> </u>	<u> </u>
b) For each well, have any parameters whose concentrations or values have exceeded the maximum contaminant levels allowed in drinking water supplies been separately identified?	<u>x</u>	<u> </u>	<u> </u>
c) Annual reports including:			
1) Concentrations or values of parameters used as indicators of ground-water contamination for each well along with required evaluations under 265.93(b)?	<u>x</u>	<u> </u>	<u> </u>
2) Any significant differences from initial background values in up-gradient wells separately identified?	<u>x</u>	<u> </u>	<u> </u>
3) Results of the evaluation of ground-water surface elevations?	<u>x</u>	<u> </u>	<u> </u>

*EPA will be proposing (Spring 1982) to replace this reporting requirement with an exception reporting system where reports will be submitted only where maximum contaminant levels or significant changes in the contamination indicators or other parameters are observed. EPA has delayed compliance stage for 14 a) above until August 1, 1982 (Federal Register, February 23, 1982, p.7841-7842) to be coupled with exception reporting in the interim.

ITEM 14 COMMENTS.

The monitoring wells have been completed and the first samples were taken in March 1985. The first samples indicate that the groundwater has been impacted with contaminants. As stated in the first annual report, measures for a clean-up plan are currently in progress.

LEGEND

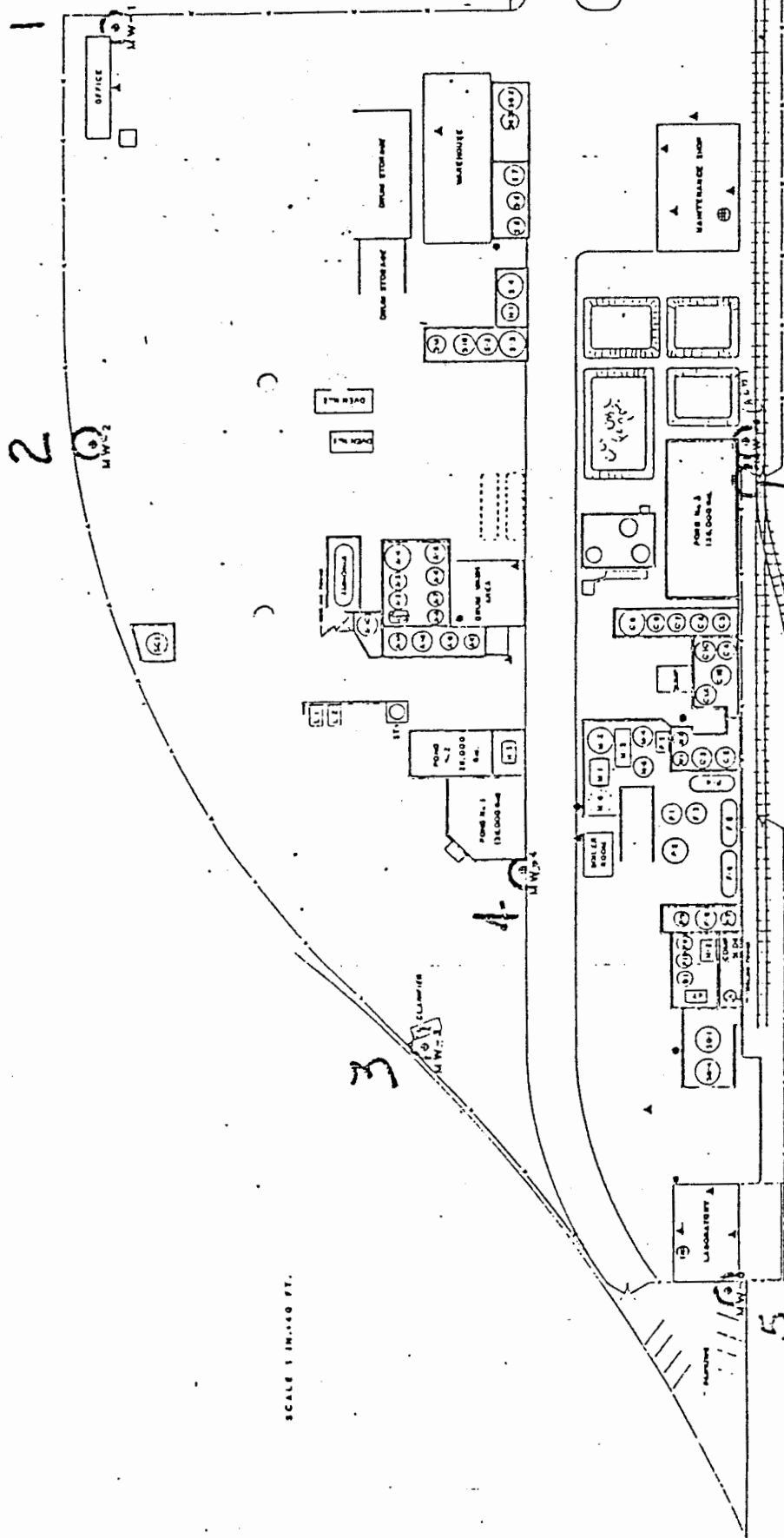
SOUTHERN CALIFORNIA CHEMICAL CO.
MONITORING WELL LOCATIONS

MW-2 MONITORING WELL # 2

- ① FIRST AID STATION
- SAFETY SHOWERS
- AIR TIGHT

SCALE 1 IN. = 40 FT.

SITE PLAN



GA - NOT PRODUCTIVE

8851

LEGEND

— LINES OF EQUAL PRESSURE ELEVATIONS—PRINCIPAL AQUIFER (INTERPOLATED BETWEEN WELLS) SAME AS ABOVE—LOCATION APPROXIMATE

— RESTRICTIONS OR BARRIERS TO GROUND-WATER MOVEMENT (GEOLOGIC AND/OR HYDROLOGIC)

— LINE APPROXIMATELY MARKING TRANSITION FROM FREE GROUND-WATER LEVELS TO PRESSURE LEVELS (CENTRAL COASTAL PLAIN 1933, DWR BULL. NO. 43)

----- GROUND SURFACE CONTOURS

SPREADING GROUNDS

== CHANNEL; IMPERVIOUS LINING, SIDES AND BOTTOM

== CHANNEL WITH BOTTOM OPEN; SIDES, IMPERVIOUS LINING

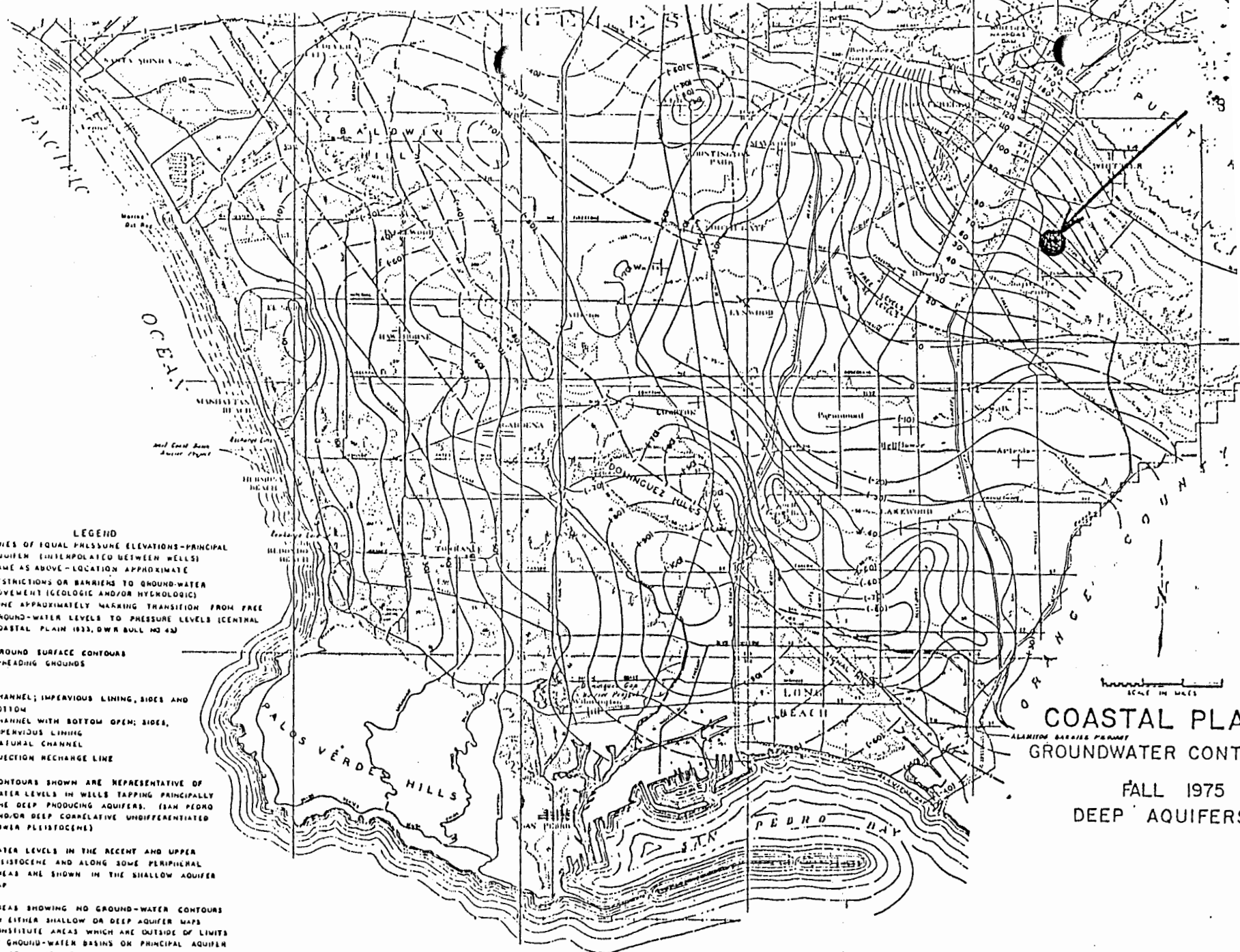
===== NATURAL CHANNEL

--- INJECTION RECHARGE LINE

NOTE: CONTOURS SHOWN ARE REPRESENTATIVE OF WATER LEVELS IN WELLS TAPPING PRINCIPALLY THE DEEP PRODUCING AQUIFERS. (SAN PEDRO AND/OR DEEP CORRELATIVE UNDIFFERENTIATED LOWER PLISTOCENE)

WATER LEVELS IN THE RECENT AND UPPER PLISTOCENE AND ALONG SOME PERIPHERAL AREAS ARE SHOWN IN THE SHALLOW AQUIFER MAP

AREAS SHOWING NO GROUND-WATER CONTOURS ON EITHER SHALLOW OR DEEP AQUIFER MAPS CONSTITUTE AREAS WHICH ARE OUTSIDE OF LIMITS OF GROUND-WATER BASINS OR PRINCIPAL AQUIFER OR FOR WHICH THERE IS INSUFFICIENT INFORMATION.



SCALE IN MILES

COASTAL PLAIN

GROUNDWATER CONTOUR

FALL 1975

DEEP AQUIFERS

APPROXIMATE LOCATION OF
SOUTHERN CALIFORNIA CHEMICAL CO.

10

STATUS REPORT OF RCRA FACILITY WITH G/W
MONITORING REQUIREMENTS

Facility Name: Southern California Chemical Co., Inc

Location: 8851 Dice Road, Santa Fe Springs

EPA ID #: CAD008488025

Status: Southern California Chemical Company is required to develop a groundwater monitoring program as required by their ISD permit. Regional Board sent them a letter dated 5/18/84, asking the company to implement groundwater monitoring program and supply relevant technical information (copy of the letter attached).

The company has submitted a groundwater monitoring proposal to the Regional Board. A copy of this proposal was sent to DOHS for their review and comment. The company's groundwater monitoring proposal is under review and after getting DOHS comments, adequacy of their ^{proposed} groundwater monitoring program will be determined.



May 18, 1984

83-8

Southern California Chemical Co., Inc.
8851 Dice Road
Santa Fe Springs, CA 90670

Attn: Ms. Tere King, Manager
Environmental Affairs

RE: Interim Status Document
(ISD) Monitoring (CAD008488025)

Dear Ms. King:

According to your Interim Status Document (ISD) issued by the Department of Health Services you were required to install wells and monitor groundwater around your hazardous waste storage ponds. Section 4 of the Groundwater Monitoring Section of the ISD requires quarterly reporting of monitoring data to the Regional Board. In addition, if the monitoring data indicates a significant increase in constituent levels (or pH decrease) between the monitoring and background wells you are required to notify the Regional Board and implement a groundwater assessment program.

To date we have not received any monitoring data from you for the above groundwater monitoring program. You are hereby requested to submit to this Regional Board by June 1, 1984, the following information.

- (1) Monitoring Well Information
 - a. location of wells in relationship to facility units;
 - b. well construction and development methods;
 - c. well logs;
 - d. perforated intervals
- (2) Details of the sampling and analysis plan required in Section 2(a) of the Groundwater Monitoring Section of your ISD.
- (3) All data collected including replicates.
- (4) Statistical analysis of all data as required in Section 3(b) of the ISD Groundwater Section.

- (5) The outline of the groundwater quality assessment program required by Section 3(a) of the ISD Groundwater Monitoring Section.
- (6) Any additional notifications or monitoring data required by the ISD Groundwater Monitoring Section as a result of data collected in (3) and (4) above.

If you are required pursuant to your ISD to implement unsaturated zone monitoring you are hereby requested to submit to this Regional Board by June 1, 1984 the following information:

- (1) The unsaturated zone monitoring plan and rationale for its development.
- (2) Results of all analyses, including background data, collected from the unsaturated zone monitoring system.

If you have not implemented the ISD required groundwater or unsaturated zone monitoring please respond by May 25, 1984. This response shall include a detailed explanation as to your failure to implement the required monitoring. If, according to the ISD or the Resource Conservation and Recovery Act you are still required to implement groundwater or unsaturated zone monitoring your response shall include a detailed time schedule for implementation of the required monitoring.

If you have any questions concerning this matter, please contact Hank Yacoub or John Lewis at the above telephone number.

Very truly yours,

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

cc: Department of Health Services, Toxic Substances Control Division, Los Angeles
Attn: John Hinton
State Water Resources Control Board, Division of Technical Services
Attn: Ed Anton
Attn: Fred Lercari
Environmental Protection Agency, Region 9, Attn: Mr. Phil Bobel
Philipp Brothers Chemicals, Inc., Attn: Mr. Vinny Krajewski, Environmental Engineer
City of Santa Fe Springs
Los Angeles County Engineer-Facilities
Attn: Carl Sjoberg

JLL:mp

FIRM NAME Southern Cal ChemicalTEL. 723-4614 SECTOR NAADDRESS OF PREMISES 8851 Dice RoadCITY S.F.S.NATURE OF BUSINESS Ferrous chloride, copper oxide, and ammonia estersRESPONSIBLE PERSON TO CONTACT Terry King TITLE Purchasing Agent

INSPECTION REPORT

TANK GROUP NO. _____ TANK LIST PREPARED BY T. Van Adler DATE 11-21 19 83

Reinspection Record on Summary Sheet

Tank No.	Ht.	Dia.	Type	Seal	Product Stored	RVP (lb.)	Prod. Stg. Temp.	Shell	Serv.	Vapor Control	Permit Status	Capacity	Remarks
1			O		Waste water treatment pond 1	-	amb			n/a	M20814	40,000 gal	open to atm
2			O		holding pond 2 process water	-	"			n/a	M20814	20,000 gal	" " "
3			O		rain water holding pond 3	-	"			n/a	M20814	180,000 gal	" " "
F1 holding tank			C		spent ferric chloride	-	"			scrubber	M13597	2,000 gal	Solution prior to F2 reaction
F3 holding tank			C		ferrous chloride	-	"			solution for scrubber	M11369	4,500 gal	also feeds solution to chlorinators
F4 (old I-1 tank)			C		ferrous chloride	-	"			scrubber	M13597	6,000 gal	use to be 2nd chlorinator
F5			P		chlorinator	3 psi	"			scrubber	M13597	6,000 gal	
F6			P		chlorinator	3 psi	"			scrubber	M13597	6,000 gal	
F7 included on Eng. Field			C		ferric chloride	-	"			n/a	M13597	7,200 gal	holding tanks used
F8 report on old opal # A78104 P67/169			C		ferric chloride	-	"			n/a	M13597	7,000 gal	to load onto trucks
as part of basic equipment 1-5-1976			C		ferric chloride	-	"			n/a	M13597	3,000 gal	dilution tank
F10			C		ferric chloride	-	"		S	n/a	EXEMPT R203	5,600 gal	finished product with $\leq 1\%$ HCl
F11			C		ferric chloride	-	"		S	n/a	EXEMPT R203	2,600 gal	finished product with $\leq 1\%$ HCl
SG 1 water treatment grade					ferric chloride	-	"		S	n/a	EXEMPT R203	16,000 gal	a more dilute soln of $\leq 1\%$ HCl
SG 2 water treatment grade					ferric chloride	-	"		S	n/a	EXEMPT R203	6,400 gal	a more dilute soln of $\leq 1\%$ HCl

Codes and Standard Terminology

Type: C-Fixed Roof; F-Floating Roof; P-Pressure; O-Open Top; S-Spheroid; H-Horizontal; U-Underground;

IF-Internal Floating Roof

Shell: R-Riveted; W-Welded

Service: S-Storage; R-Rundown; B-Blending; M-Mixing

Control: N-None; PVV-Conservation Vents; F-Floating Roof (SS-Single Seal; DS-Double Seal); V. R. -Vapor Recovery;

V. D. -Vapor Disposal; V. B. -Vapor Balance

FIRM NAME

Southern Cal Chemical

SOUTHERN CALIFORNIA CHEMICAL CO., INC.

TEL. 723-4614M.R.NO. SECTOR WN

ADDRESS OF PREMISES

8851 Dice RoadCITY S.F.S.

NATURE OF BUSINESS

ferrous chloride, copper oxide, and ammonia Etchants

RESPONSIBLE PERSON TO CONTACT

Terry King

TITLE

Purchasing Agent

INSPECTION REPORT

TANK GROUP NO.

TANK LIST PREPARED BY

T. Van Andler

DATE

11-21-1983

Reinspection Record on Summary Sheet

Tank No.	Ht.	Dia.	Type	Seal	Product Stored	RVP (lb.)	Prod. Stg. Temp.	Shell	Serv.	Vapor Control	Permit Status	Capacity	Remarks
SG3	water treatment	grade			ferric chloride	-	amb.		S	n/a	Exempt R203	2,000 gal.	a more dilute soln. of $\leq 1\%$ HCl
SG4	water treatment	grade			ferric chloride	-	"		S	n/a	Exempt R203	16,000 gal.	a more dilute soln. of $\leq 1\%$ HCl
H2				C	sulfuric acid	-	"		S	n/a	Exempt R219 n-1	4,000 gal.	raw material
B1				C	chrome sulfuric	-	"		S	n/a	Exempt R219 n-1	3,000 gal.	product
CR1				C	chrome sulfuric	-	"		M	n/a	RPermit 35246	3,700 gal.	mixing only no storage
m1				C	HCl	-	"		S		P00377	6,000 gal.	copper oxide area
m2				C	HCl	-	"		S		M11215	12,000 gal.	raw materials
m3				C	HCl	-	"		S		Appl. # C42963	6,500 gal.	"
m4				C	HCl	-	"		S		Appl. # C43268	8,000 gal.	"
m5				C	HCl	-	"		S		Appl. # C43267	10,000 gal.	"
m6				C	HCl	-	"		-		Appl. # C43266	HAS NOT BEEN PURCHASED AS YET	
N1				C	NaOH	-	"		S		Exempt R201	5,000 gal.	raw materials
N2				C	NaOH	-	"		S		Exempt R201	5,000 gal.	raw materials
P2				O	rain water	-	"		S		Exempt R203	3,700 gal.	extra storage not used anymore
C-1A	closed during reaction				copper oxide	-	180°F		-	scrubber	M11478	6,000 gal.	reactor - not storage

Codes and Standard Terminology

Type: C-Fixed Roof; F-Floating Roof; P-Pressure; O-Open Top; S-Spheroid; H-Horizontal; U-Underground;

IF-Internal Floating Roof

Shell: R-Riveted; W-Welded

Service: S-Storage; R-Rundown; B-Blending; M-Mixing

Control: N-None; PVV-Conservation Vents; F-Floating Roof (SS-Single Seal; DS-Double Seal); V. R. -Vapor Recovery; V. D. -Vapor Disposal; V. B. -Vapor Balance

POLLUTION CONTROL DISTRICT -

PROPRIETARY MATERIAL OF
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

M.R.NO. _____

FIRM NAME Southern Cal Chemical
ADDRESS OF PREMISES 8851 Dice Road

TEL. 723-4614 SECTOR WN
CITY S.F.S.

NATURE OF BUSINESS Ferrous chloride, copper oxide and ammonia etchants

RESPONSIBLE PERSON TO CONTACT Terry King TITLE Purchasing Agent

INSPECTION REPORT

TANK GROUP NO. _____ TANK LIST PREPARED BY T. Van Andler DATE 11-28 19 83

Reinspection Record on Summary Sheet

Tank No.	Ht.	Dia.	Type	Seal	Product Stored	RVP (lb.)	Prod. Stg. Temp.	Shell	Serv.	Vapor Control	Permit Status	Capacity	Remarks
C-1B			closed during reaction		copper oxide	-	180°F	-		scrubber	M11479	6,000 gal.	reactor, not for storage
C-1C					copper oxide		180°F			scrubber	Oppl. # 113648	6,000 gal.	new - under construction
C2			C		ammonium chloride		ambi			n/a	M19186	4,500 gal.	recirculates scrubber solution to scrubber
C3			C		ammonium chloride		"			n/a	M19186	4,500 gal.	same as above
C4			C		copper ammonia etchant		"		S	n/a	EXEMPT R203	7,800 gal.	
C5			C		copper ammonia etchant		"		S	n/a	EXEMPT R203	4,000 gal.	
C6			C		spent cupric chloride		"		S	n/a	EXEMPT R203	5,600 gal.	
C7			C		spent cupric chloride		"		S	n/a	EXEMPT R203	7,000 gal.	
C8			C		cupric chloride		"		S	n/a	EXEMPT R203	4,000 gal.	
A-1A			C		ammonia and water		120°F		M	n/a	M19230	5,000 gal.	mix tank only
A-1B			C		ammonia and water		120°F		M	n/a	M19230	6,000 gal.	mix tank only
A-2			C		10% ammonia etchant		"		S	55 gal. water vent trap	M19230	4,200 gal.	A-process replenisher product
A-3			C		10% ammonia etchant		"		S	55 gal. water vent trap	M19230	5,600 gal.	A-process replenisher product
A-4			C		10% ammonia etchant		"		S	same as above	M19230	6,000 gal.	A-process replenisher product
A-5			C		10% ammonia etchant		"		S	same as above	M19230	9,500 gal.	A-process replenisher product

Codes and Standard Terminology

Type: C-Fixed Roof; F-Floating Roof; P-Pressure; O-Open Top; S-Spheroid; H-Horizontal; U-Underground;
IF-Internal Floating Roof
Shell: R-Riveted; W-Welded
Service: S-Storage; R-Rundown; B-Blending; M-Mixing
Control: N-None; PVV-Conservation Vents; F-Floating Roof (SS-Single Seal; DS-Double Seal); V. R. -Vapor Recovery;
V. D. -Vapor Disposal; V. B. -Vapor Balance

POLLUTION CONTROL DISTRICT -

PROPRIETARY MATERIAL OF
SOUTHERN CALIFORNIA CHEMICAL CO., INC.

M.R.NO. _____
TEL. 723-4614 CITY S.F.S. SECTOR WIN 1

FIRM NAME Southern Cal Chemical

ADDRESS OF PREMISES 8851 Dixie Road

NATURE OF BUSINESS ferrous chloride, copper oxide, and ammonia extracts

RESPONSIBLE PERSON TO CONTACT Terry King

TITLE Purchasing Agent

INSPECTION REPORT

TANK GROUP NO. _____ TANK LIST PREPARED BY T. Van der Meer DATE 11-28 19 83

Reinspection Record on Summary Sheet

Tank No.	Ht.	Dia.	Type	Seal	Product Stored	RVP (lb.)	Prod. Stg. Temp.	Shell	Serv.	Vapor Control	Permit Status	Capacity	Remarks
A-6			C		10% ammonia extract	unt	amb		S	55 gal. water vent trap	M19230	4,000 gal.	B-process replenisher product
A-7 (old A-5)			C		water + acid solution (2.3% HCl)	"	"		S	n/a	EXEMPT R203	2,000 gal.	Soder brightener product.
A-8 (old A-6)			C		water + acid solution (2.3% HCl)	"	"		S	n/a	EXEMPT R203	3,000 gal.	Soder brightener product.
S-1A			O		sulfuric acid mix	tkc	"		M	n/a	EXEMPT R219 n-1	3,000 gal.	to make copper sulfate.
S-1B			O		sulfuric acid mix	tanks	"		M	n/a	EXEMPT R219 n-1	5,000 gal.	to make copper sulfate.
S-2			O		copper sulfate		"		S	n/a	EXEMPT R203	6,000 gal.	product.
S-3			C		copper sulfate		"		S	n/a	"	12,000 gal.	product.
S-4			C		copper sulfate		"		S	n/a	"	12,000 gal.	product.
S-5			C		copper sulfate		"		S	n/a	"	3,500 gal.	product.
S-6			C		copper sulfate		"		S	n/a	"	4,000 gal.	product.
S-7			C		copper sulfate		"		S	n/a	"	3,000 gal.	product.
A-9			C		10% ammonia extract					55 gal. water vent trap	M19230	5,000 gal.	A-process replenisher product.

Codes and Standard Terminology

Type: C-Fixed Roof; F-Floating Roof; P-Pressure; O-Open Top; S-Spheroid; H-Horizontal; U-Underground; IF-Internal Floating Roof

Shell: R-Riveted; W-Welded

Service: S-Storage; R-Rundown; B-Blending; M-Mixing

Control: N-None; PVV-Conservation Vents; F-Floating Roof (SS-Single Seal; DS-Double Seal); V. R. -Vapor Recovery; V. D. -Vapor Disposal; V. B. -Vapor Balance

Chemical	% Concentration	Recommended Temperature Limit (°F/°C)		
		ATLAC 382 and 711	ATLAC 4010	ATLAC 580
Sulfuric Acid	1	220 (104)	200 (93)	200 (93)
	5	220 (104)	200 (93)	200 (93)
	10	220 (104)	200 (93)	200 (93)
	25	220 (104)	200 (93)	200 (93)
	50	220 (104)	200 (93)	200 (93)
	70	190 (88)	190 (88)	190 (88)
	75	110 (43)	110 (43)	110 (43)
	Fumes	210 (99)	200 (93)	200 (93)
Sulfurous Acid	All	110 (43)	110 (43)	110 (43)
Sulfuryl Chloride	—	N.R.	N.R.	N.R.
Superphosphoric Acid (105% H ₃ PO ₄)	—	220 (104)	200 (93)	200 (93)
Tall Oil	—	150 (66)	150 (66)	150 (66)
Tannic Acid	All	220 (104)	200 (93)	200 (93)
Tartaric Acid	All	220 (104)	200 (93)	200 (93)
Tetrachloroethylene	100	110 (43)	110 (43)	110 (43)
Tetrapotassiumpyrophosphate	60	125 (51.8)	125 (51.8)	125 (51.8)
Tetrasodiumpyrophosphate	5	220 (104)	200 (93)	200 (93)
	60	125 (51.8)	125 (51.8)	125 (51.8)
Textone®	—	220 (104)	200 (93)	200 (93)
Thioglycolic Acid	10	120 (49)	120 (49)	120 (49)
Thionyl Chloride	100	N.R.	N.R.	N.R.
* Tin Fluoborate (Plating)	—	220 (104)	200 (93)	200 (93)
Toluene	100	N.R.	N.R.	N.R.
Toluene Di-isocyanate (TDI)	100	110 (43)	110 (43)	110 (43)
Toluene Sulfonic Acid	All	220 (104)	200 (93)	200 (93)
Transformer Oils	—	220 (104)	200 (93)	200 (93)
Trichloroacetaldehyde	100	N.R.	N.R.	N.R.
Trichloroacetic Acid	50	220 (104)	200 (93)	200 (93)
Trichloroethylene	100	110 (43)	N.R.	N.R.

* 20 Mils of synthetic surfacing mat, such as Dynel or Orlon should be used to reinforce surface in contact with chemical.

** Satisfactory up to maximum stable temperature for product.

N.R. = Not Recommended.

TABLE B

CHEMICALS USED IN POND NUMBER 1

Ammonium sulfate solution
Sodium chloride solution
Ferrous hydroxide solution
Copper ammonium chloride solution
Chromic-sulfuric acid solution *
Sodium sulfate solution
Sulfuric acid solution
Ammonium chloride
Free ammonium
Copper sulfide
Iron sulfide
Chrome sulfide ✓
Nickel sulfide ✓
Zinc sulfide
Lead sulfide

NOTES: * See discussion in Section 4.0 concerning Chromic-sulfuric acid solution.

PLATE 17

IF, Cu, Cr, As, etc.

Chemicals in SCC's Wastewater Neutralization System

Quantity		SCC Materials (Prior to Pretreatment as Required by EPA & LACSD)	pH 13-14 Solution in Tank Prior to Treatment	Neutralization*	Metals Precipitation (By Addition of Reducing Agent such as Sodium Sulfide)	Solution After Precipitation	Oxidation If Needed	Effluent Discharged to LACSD 22,000-27,000 gpd pH above 6
1.0-1000 gpd		Ferric chloride solution, $FeCl_3$ (may contain metals such as Ni, Zn, Cr, Pb, Sn, As, etc., e.g.)	~8% $FeOH$ + $NaCl$ (as result of exposure to h pH media)		+ $Na_2S \rightarrow FeOH, PbS, NiS, SnS, CrS, ZnS, AsS$ + $NaCl$			
2.		Ferrous chloride solution, $FeCl_2$ (same as above)						
3.15-2000 gpd		10% sodium chloride solution	$NaCl$					
4.		1-2% sodium hydroxide solution	$NaOH$	+ H_2SO_4 (w/ or w/o H)	+ $Na_2S \rightarrow PbS, AsS, FeS$	+ $(NH_4)_2SO_4$ &/or Na_2SO_4		
5.		Residual sodium carbonate	$NaCO_3$	+ HCl (w/ or w/o H)	+ $Na_2S \rightarrow TiS, FeS, SnS$	+ NH_4Cl &/or $NaCl$		
6.		Ammonium hydroxide	NH_4OH	+ H_3PO_4 (w/ or w/o H)	+ $Na_2S \rightarrow MS$	+ $(NH_4)_2HPO_4$ &/or Na_2HPO_4		
7.		<1% free ammonium chloride soln	NH_4Cl	+ HNO_3 (w/ or w/o H)	+ $Na_2S \rightarrow MS$	+ NH_4NO_3 &/or $NaNO_3$		
8.		<1% free ammonia + other water	$NH_3 + H_2O$	Citric acid (w/ or w/o H)	+ $Na_2S \rightarrow MS$	+ Ammonium citrate &/or sodium citrate		
9.		Cupric ammonium chloride solution	$Cu \cdot 2(NH_4)Cl_2$		+ $Na_2S \rightarrow CuS$	+ $2NH_4OH - 2NH_4Cl$		
10.0-2000 g/mo		1-2% ammonium sulfate solution**	$(NH_4)_2SO_4$					
11.0-200 gpd		Ammonium bifluoride soln, NH_4HF_2 pH 3; w/Sn, Pb, Cu, etc.	NH_4F (as result of exposure to h pH media)		+ $Na_2S \rightarrow SnS, PbS, CuS$	+ NH_4F		$2NH_4F$
12.0-100 gpd		Nickel sulfate solution	$NiSO_4$		+ $Na_2S \rightarrow NiS$	+ $(NH_4)_2SO_4$ &/or Na_2SO_4		
13.0-100 gpd		Zinc sulfate solution	$ZnSO_4$		+ $Na_2S \rightarrow ZnS$	+ $(NH_4)_2SO_4$ &/or Na_2SO_4		
		*May add any of the neutralizing acids listed in this column, alone or in combinations; may contain metals. **Normally sold rather than discharged.						

See reverse side for instructions.
Please print or write clearly. Press Hard.

State Department of Health Services
HAZARDOUS MATERIAL MANAGEMENT SECTION
744 P Street, Sacramento, CA 95814

1 Manifest Number **189 000452**

GENERATOR

(GENERATOR MUST COMPLETE)

3 Designated TSD Facility (Authorized to operate under an approved state program or federal program.)

4 Alternate TSD Facility

2 Name **SOUTHERN CALIF CHEM**
EPA # **CA 01008148101215**
Address **8751 DICE RD** Phone **698-8036**
City, State, Zip **S.F.S. CA 90670**

Name **BKK**
EPA # **CA 01067781617419**
Address **2210 AZUSA RD** Phone **965-0916**
City, State, Zip **WEST COVINA CA**

Name _____
EPA # _____
Address _____ Phone _____
City, State, Zip _____

5 U.S. DOT PROPER SHIPPING NAME WASTE N/A	U.S. DOT HAZARD CLASS	UN/NA ID NO.	WEIGHT OR VOLUME 5.000	UNITS GALS	NUMBER OF CONTAINERS TYPE: <input type="checkbox"/> DRUMS <input type="checkbox"/> BAGS <input type="checkbox"/> CARTONS <input checked="" type="checkbox"/> TANK TRUCK <input type="checkbox"/> DUMP TRUCK <input type="checkbox"/> OTHER
---	-----------------------	--------------	----------------------------------	----------------------	---

6 Waste Category **MUDY WATER** 7 Ext. Haz. Waste Permit No. **N/A** 8 Generating Process **METAL RECLAIMING**

LIST COMPONENTS:	CONCENTRATION RANGE		UNITS	LIST COMPONENTS:	CONCENTRATION RANGE		UNITS
	UPPER	LOWER			UPPER	LOWER	
9 A. IRON	25	15	<input checked="" type="checkbox"/> % <input type="checkbox"/> ppm.	E. _____	_____	<input type="checkbox"/> % <input type="checkbox"/> ppm.	
B. COPPER	5	2	<input checked="" type="checkbox"/> % <input type="checkbox"/> ppm.	F. _____	_____	<input type="checkbox"/> % <input type="checkbox"/> ppm.	
C. CHROME	3	1	<input checked="" type="checkbox"/> % <input type="checkbox"/> ppm.	G. _____	_____	<input type="checkbox"/> % <input type="checkbox"/> ppm.	
D. OTHER METALS	1	1	<input checked="" type="checkbox"/> % <input type="checkbox"/> ppm.	Non-Hazardous Material _____ %			

10 WASTE PROPERTIES: pH **7.0** ☐ Toxic ☐ Flammable ☐ Corrosive/Irritant ☐ Reactive ☐ Sensitizer ☐ Carcinogen/Mutagen

11 PHYSICAL STATE: ☐ Solid ☐ Liquid ☒ Sludge ☐ Slurry ☐ Gas ☐ Other

12 SPECIAL HANDLING INSTRUCTIONS: ☒ Gloves ☐ Goggles ☐ Respirator ☐ Other **WASH SPILLS WITH WATER**

GENERATOR CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked, labeled, and are in proper condition for transportation according to the applicable regulations of the Department of Transportation and EPA.

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL
RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802

13 **[Signature]**
Signature of Authorized Agent and Title

12-5-81
Date Shipped

TRANSPORTER

(HAULER MUST COMPLETE)

14 TRANSPORTER NAME **NASH SALVAGE INC.**
ADDRESS **16211 Placid Drive** PHONE **(213) 941-5117**
CITY, STATE, ZIP **Whittier, CA 90604**

15 PICK-UP DATE **12-8-81** #2255
EPA NO. **CA 010990802993** Time **12:30** ☐ AM ☒ PM
16 **[Signature]**
Signature of Authorized Agent and Title
12-8-81
Date

TSD FACILITY

(FACILITY-OPERATOR MUST COMPLETE)

7 NAME **BKK** 18 QUANTITY (If Measured) **20.97**
EPA NO. **CA 01067781617419** 19 STATE FEE (If Any) **20.97**
PHONE NO. **9650911**

20 INDICATE ANY SIGNIFICANT DISCREPANCIES BETWEEN MANIFEST AND SHIPMENT:

RECEIVED

DEC 23 1981

IF WASTE IS HELD FOR DELIVERY ELSEWHERE, SPECIFY THE DESIGNATED TSD FACILITY:

22 Designated TSD Facility Name **SO. CALIF. CHEM. CO.**
23 **[Signature]**
Signature of Authorized Agent and Title

21 HANDLING OR DISPOSAL METHOD:

☐ Surface Impoundment ☒ Landfill
☐ Injection Well ☐ Land Treatment
☐ Treatment (Specify) _____
☐ Recovery or Re-use ☐ Storage/Transfer
☐ Recycle

EPA NO. **12-8-81**
Date Accepted

WASTE MANAGEMENT BRANCH

UNIFORM HAZARDOUS WASTE MANIFEST

San Francisco, CA 95514

70270

STATE ID NUMBER 83040102

Print or type with ELITE type (12 characters per inch).

GENERATOR NAME AND MAILING ADDRESS

MANIFEST DOCUMENT NUMBER

Southern California Chemical Co., Inc.
8051 Dice Road, Santa Fe Springs, Ca. 90670
(213) 658-8036

EPA ID NUMBER

AREA CODE/PHONE NUMBER

TRANSPORTER NO. 1

VEH./CONTAINER NO.

EPA ID NUMBER

Nash Salvage, Inc., 16211 Placid Drive
Whittier, Ca. 90604

TRANSPORTER NO. 2/ALTERNATE TSD FACILITY

VEH./CONTAINER NO.

EPA ID NUMBER

TREATMENT, STORAGE, OR DISPOSAL (TSD) FACILITY

EPA ID NUMBER

BEK LOP
2210 Arusa Rd., West Covina, Ca.
(213) 965-0916

AREA CODE/PHONE NUMBER

PROPER U.S. D.O.T. SHIPPING NAME AND HAZARD CLASS	UN/NA NUMBER	TOTAL QUANTITY	UNIT WT/VOL	CONTAINER NO.	WASTE CAT NO.
Unspecified Sludge Waste (Non-Halogenated)	NON-FL	4500	G	001	401

COMPONENTS	CONC. RANGE		UNITS	
	UPPER	LOWER	%	P
Tin	25	15	✓	
Copper	5	2	X	
Other Metals	1	.1	X	
Water	75	60	X	

SPECIAL HANDLING INSTRUCTIONS

Gloves, Goggles

This is to certify that the above-named wastes are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation according to the applicable requirements of the Department of Transportation and the EPA.

G. G. Otterbach, Plant Manager

Printed or typed full name and signature

MO. DAY YF
07 28 81

☐ Check if continuation sheet is used. Number of continuation sheets

TRANSPORTER 1 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES

Nash Salvage Driver

Printed or typed full name and signature

DATE REC'D & ACCEPTED MO. DAY YF
17 1 1

TRANSPORTER 2 ACKNOWLEDGEMENT OF RECEIPT OF ABOVE WASTES

Printed or typed full name and signature

DATE REC'D & ACCEPTED MO. DAY YF
17 1 1

DISCREPANCY INDICATION SPACE

Facility owner or operator: Certification of receipt of hazardous waste covered by this manifest except as noted in the discrepancy indication space above. Note: TSD/F must complete waste number. See instructions.

Printed or typed full name and signature

EPA ID NUMBER

DATE RECEIVED & ACCEPTED MO. DAY YF
17 1 1

TSD/F RETAINS

State of California - Department of Health Services Sanitation and Radiation Laboratory Section Southern California Laboratory Section		Date Received 3-11-85	Lab. No. 14450
SAMPLE FOR CHEMICAL ANALYSIS		(Leave Blank)	
Purveyor and Address (include city and county) Southern Chem. Co. SFS		System Number 000000	Serial Number C 21166
Sampling Point Well #4		Collected by AAIL/FH	Date and Hour Collected 3/11/85, 15:42
Type of Sample	<input type="checkbox"/> Raw Surface Water <input type="checkbox"/> Waste water: <input type="checkbox"/> Drinking Water <input type="checkbox"/> Raw <input type="checkbox"/> Chlorinated <input type="checkbox"/> Raw <input type="checkbox"/> Trade Waste <input type="checkbox"/> Treated <input checked="" type="checkbox"/> Other n/w		
		Send Report To	<input type="checkbox"/> WSS Dist. # <input type="checkbox"/> County HD <input type="checkbox"/> DOT Dist. # <input type="checkbox"/> National Park Serv. <input checked="" type="checkbox"/> RWCCA # 4 <input type="checkbox"/> Other

Results are expressed as mg/l unless specified

<input checked="" type="checkbox"/> GENERAL MINERAL ANALYSIS (mg/l as Ca CO ₃)		TRACE ELEMENTS		<input checked="" type="checkbox"/> Other analyses desired (specify): Hex. Cr = 469 mg/l Residuals and Phenols = .001 mg/ml	
<input type="checkbox"/> Ca 980. <input type="checkbox"/> Mg 124. <input type="checkbox"/> Fe Total 0.95 <input type="checkbox"/> Mn 3.4 <input type="checkbox"/> Na 203. <input type="checkbox"/> K 5. <input type="checkbox"/> pH 6.2 <input type="checkbox"/> Total Dissolved Solids 5650	<input type="checkbox"/> Hardness 2550. <input type="checkbox"/> HCO ₃ 502. <input type="checkbox"/> CO ₃ 10. <input type="checkbox"/> OH 10. <input type="checkbox"/> Total Alk. 502. <input type="checkbox"/> Cl 1700. <input type="checkbox"/> SO ₄ 220. <input type="checkbox"/> F 0.31 <input type="checkbox"/> NO ₃ 117.	<input type="checkbox"/> Al <input checked="" type="checkbox"/> Ag <0.001 <input checked="" type="checkbox"/> As <0.01 <input type="checkbox"/> B <input checked="" type="checkbox"/> Cd 0.560 <input checked="" type="checkbox"/> Cr 520 <input checked="" type="checkbox"/> Cu 0.02 <input checked="" type="checkbox"/> Hg 0.12 <input checked="" type="checkbox"/> Pb <0.01 <input checked="" type="checkbox"/> Ni 0.05 <input checked="" type="checkbox"/> Se <0.005 <input checked="" type="checkbox"/> Zn 0.05 <input checked="" type="checkbox"/> Ba	Date Reported: 4-8-85 Analyst: HL NY MOT		
<input type="checkbox"/> Turb. TU <input checked="" type="checkbox"/> Spec. Cond. 6619	<input checked="" type="checkbox"/> NH ₃ -N 0.24 <input type="checkbox"/> ORN-N	<input type="checkbox"/> BOD <input type="checkbox"/> Grease	<input type="checkbox"/> Susp. Solids <input type="checkbox"/> Set Solids ml/l/hour	<input type="checkbox"/> PO ₄ <input type="checkbox"/> MBAS	

STATE OF CALIFORNIA—DEPARTMENT OF HEALTH SERVICES
SANITATION AND RADIATION LABORATORY SECTION
SOUTHERN CALIFORNIA LABORATORY SECTION

DATE

TIME

LAB NO.

3/11/85

3:15

10083

SAMPLE FOR MICROBIOLOGICAL EXAMINATION

LABORATORY USE ONLY

PURVEYOR AND ADDRESS

COUNTY

DATE AND HOUR COLLECTED

Southern Calif. Chem. Co.
Santa Fe Springs

Los Angeles

3/11/85, 1:40p

SAMPLING POINT

SYSTEM NUMBER

COLLECTED BY

BOTTLE CAP NUMBER

well #4

000X000

AAK

TYPE OF SAMPLE: ☐ DRINKING WATER (ANY SOURCE)

☐ SEWAGE

☐ RAW SURFACE WATER

SEND REPORT TO:

☒ OTHER (SPECIFY) groundwater

☐ SER DIST

☐ COUNTY NO

☒ RWOCB # 4

☐ OTHER

☐ NAT'L PARK

PHONE NO. ()

ANALYSES DESIRED AND REMARKS:

☒ COLIFORM

☐ FECAL COLIFORM

☐ SPC

☐ OTHER

(TO BE FILLED IN BY LABORATORY ONLY)

TUBE NUMBER OR PORTIONS

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

RESULTS

PORTIONS IN ML (LOGS)

1 1 1 1 1

COLIFORM/100ml

☒ MPN

☐ MF

75

PRESUMPTIVE

24

TEST

48

FECAL COLIFORM/100ml

☐ MPN

☐ MF

CONFIRMED

24

TEST

48

E.C.

24

SPC/ml

at 35C

C12 RES.

mg/liter

LABORATORY REMARKS

☐ LEAKED IN TRANSIT

☐ INSUFFICIENT SAMPLE

0-4-0

w/1ml

ANALYST

RS

CL

State of California - Department of Health Services
Sanitation and Radiation Laboratory Section
Southern California Laboratory Section

Date Received

Lab. No.

3-11-85

(Leave Blank)

14454

SAMPLE FOR CHEMICAL ANALYSIS

System Number

Serial Number

Purveyor and Address (include city and county)

Southern Calif. Chem. Co.
ST5

000X000

C 21165

Sampling Point

Collected by

Date and Hour Collected

well #4

AK/ST

3/11/85, 1:30

Type of Sample

☐ Raw Surface Water

☐ Waste water:

☐ Drinking Water

☐ Raw ☐ Chlorinated

☐ Raw

☐ Trade Waste

☐ Treated

☒ Other a/water

Send Report To

☐ WSS Dist. #

☐ County HD

☐ DOT Dist. #

☐ National Park Serv.

☒ RWOCB # 4

☐ Other

Results are expressed as mg/l unless specified

GENERAL MINERAL ANALYSIS

(mg/l as Ca CO₃)

☐ Ca

☐ Hardness

☐ Mg

☐ HCO₃

☐ Fe Total

☐ CO₃

☐ Mn

☐ OH

☐ Na

☐ Total Alk.

☐ K

☐ Cl

☐ pH

☐ SO₄

☐ Total Dissolved Solids

☐ F

☐ NO₃

TRACE ELEMENTS

☐ Al

☐ Ag

☐ As

☐ B

☐ Cd

☐ Cr

☐ Cu

☐ Hg

☐ Pb

☐ Ni

☐ Se

☐ Zn

☒ Other analyses desired (specify):

VOA

see attached sheet

Date Reported

Analyst

3-12-85

P.H.

☐ Turbidity

☐ NH₃-N

☐ BOD

☐ Susp. Solids

☐ PO₄

☐ Spec. Cond. μ mhos/cm

☐ ORG-N

☐ Grease

☐ Set Solids ml/1 hour

☐ MBAS

VOA

AN ATTACHMENT TO LAB-804

SAMPLES FOR CHEMICAL ANALYSIS

COLLECTED

3/11/85 1330 HRS

LAB NUMBER:

14454

SERIAL NUMBER:

C 21165

ANALYST:

P.H.

WELL # 4

DATE REPORTED:

3/12/85

VOC

1. 1,1 dichloroethylene = 52 $\mu\text{g/L}$

15 Ethyl toluene isomer

2. Methylene chloride = 93 $\mu\text{g/L}$

3. 1,1 dichloroethane = 41 $\mu\text{g/L}$

4. (C) 1,2 dichloroethylene = 14 $\mu\text{g/L}$

5. Chloroform = 24 $\mu\text{g/L}$

6. 1,2 dichloroethane = 13 $\mu\text{g/L}$

7. Benzene = 3.7 $\mu\text{g/L}$

8. Trichloroethylene = 225 $\mu\text{g/L}$

9. Toluene = 4500 $\mu\text{g/L}$

10. Ethyl benzene = 2100 $\mu\text{g/L}$

11. m,p - Xylenes = 2000 $\mu\text{g/L}$

12. o - Xylene = 1100 $\mu\text{g/L}$

13. Cumene

14. n-propyl benzene

TABLE D
TABULATION OF SOIL DATA
(mg/kg)

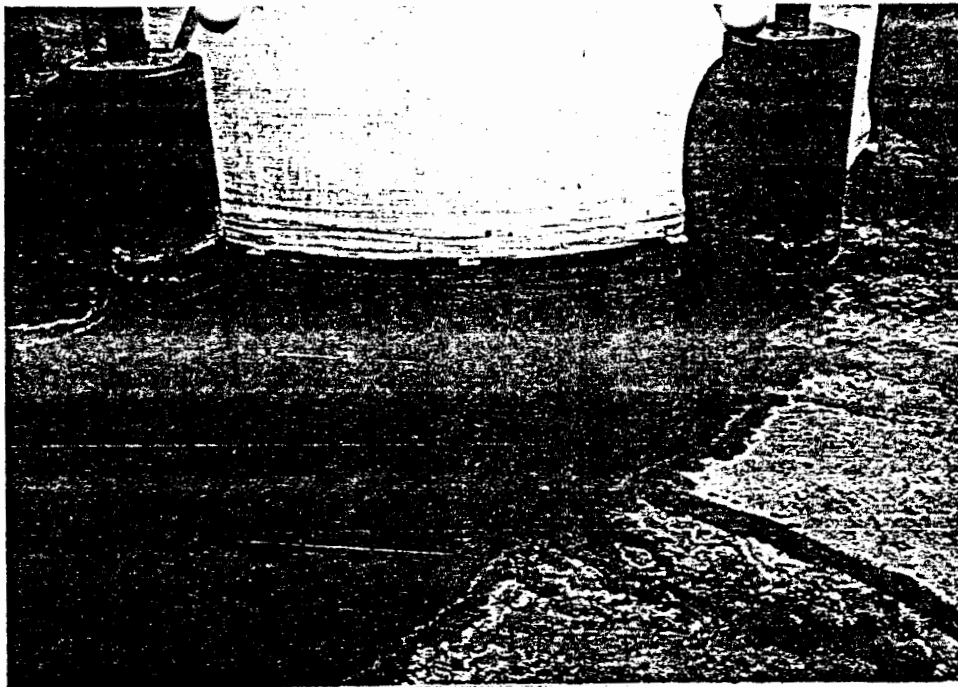
<u>Boring #</u>	<u>Depth</u>	<u>pH</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Copper</u>	<u>Zinc</u>	<u>Nickel</u>	<u>Chloride</u>	<u>Sulfate</u>	<u>Ammonia Nitrogen</u>	<u>Carbonate</u>
B1	10	8.0	--	53	470	--	--	--	--	--	--
	15	7.0	--	13	130	--	--	--	--	--	--
	40	3.9	1.5	600	400	180	--	5100	20	29	ND
	50	5.5	8.0	280	160	95	--	2600	71	10	ND
B2	15	3.9	--	54	390	--	--	--	--	--	--
	20	3.9	--	440	230	--	--	--	--	--	--
	35	3.3	1.2	2000	250	120	--	5500	41	42	ND
	40	3.3	1.4	150	550	170	--	2900	45	11	ND
B3	5	8.1	--	420	1200	--	--	--	--	--	--
	15	6.3	ND 0.67	11	31	57	--	1100	110	23	ND
B4	5	4.6	--	10000	480	--	--	--	--	--	--
	10	4.0	ND 0.62	16000	820	92	--	--	--	--	--
	25	4.2	ND 0.61	550	1200	52	--	1400	450	25	ND
B5	5	8.7	--	85	230	--	--	--	--	--	--
	10	8.3	--	30	78	79	26	--	--	--	--
	15	4.8	--	3200	12000	--	--	1600	170	21	ND
	25	4.5	--	49	160	34	12	--	--	--	--
B6	5	4.5	--	3700	460	--	--	--	--	--	--
	15	3.6	--	5100	4100	430	240	1800	2000	500	ND
	25	4.2	--	1500	1400	43	98	--	--	--	--

Notes - Depth is in feet
ND 0.67 = Not Detected at 0.67 mg/kg (ppm)

TABLE E
TABULATION OF SOIL DATA
(mg/kg)

<u>Boring #</u>	<u>Depth</u>	<u>pH</u>	<u>Cadmium</u>	<u>Chromium</u>	<u>Copper</u>	<u>Zinc</u>	<u>Nickel</u>	<u>Chloride</u>	<u>Sulfate</u>	<u>Ammonia Nitrogen</u>	<u>Carbonate</u>
4	10	--	--	16	37	52	21	--	--	--	--
	30	--	--	19	50	72	25	--	--	--	--
4A	10	4.9	--	14	410	110	31	--	--	--	--
	25	6.2	--	67	24	150	9.7	2700	79	29	ND
8	10	7.3	--	41	61	96	27	--	--	--	--
	25	8.5	--	37	94	54	ND 3.1	510	50	10	--
9	15	6.9	--	15	28	55	19	4800	67	8.4	ND
	25	7.4	--	4.3	18	29	4.6	--	--	--	--
10	10	8.3	--	31	89	100	28	--	--	--	--
	25	7.3	--	5.3	25	30	6.4	470	67	66	ND

NOTES: Depth is in feet beneath ground surface.
ND 3.1 = Not Detected at 3.1 mg/kg (ppm).



→ Concrete base of pond 1, cracks in the concrete are visible.
(photos taken on 3/25/86).



Workplan
Remedial Actions for Tank #3

Southern California Chemical Company
Santa Fe Springs, California

Prepared by
Targhee, Inc.
Long Beach, California

I. Introduction

The August 28, 1987 Consent Agreement between the State of California Department of Health Services (DHS) and Southern California Chemical Company (SCC) requires that SCC clean up and remove any hazardous wastes which may be contained in rainwater holding tank number 3 (Tank no.3).

This workplan will delineate the scope of the problem and discuss various remedial methodologies. The proposed remedial action for Tank #3 will be presented including the specific activities required as well as their justification. A tentative schedule will also be presented. Actual fixed dates will depend on receipt of agency approval(s) and resource availability.

II. Scope of Problem

Pond #3 is a polyurethane lined, concrete block open holding tank located in the south central portion of the SCC facility. It is used as a rainwater storage tank and has a total capacity of 138,000 gallons. (See Plot Plan, Appendix I.)

The materials in Pond #3 consist primarily of precipitated sludges containing metal sulfides and other inorganic residues.

Agency concern was communicated to SCC on November 6, 1986 resulting from a June 25, 1986 sampling inspection by DHS following an April 29, 1986 Notice of Violation. Analysis of the samples taken from Pond #3 discharge lines showed copper concentrations in excess of the STLC. These analytical results are included as Appendix II.

At the present time, it is estimated that between 150 and 200 cubic yards of sludge are contained in Pond #3.

III. Remediation Methodologies

Sections 3.1.15 (a)(1) and 3.1.15 (c)(4) of the Consent Agreement stipulate that the proposed remedial effort, "clean up and remove any hazardous waste(s) which may be contained in...rainwater holding tank no. 3 (tank no.3)." and "...that no hazardous waste remain[s] in Tank #3." No alternative is proposed to this directive, however some latitude exists in the choice of removal methods, techniques, or pretreatment.

Tests performed on sludge from Tank #3 (See laboratory report, Appendix III.) indicate that the material fails the standard paint filter test (SW-846, Method 9095) as referenced in 40 CFR 265.314. To facilitate acceptance of the waste at a Class I disposal facility and minimize physical handling problems, chemical elimination of free liquids in the material is indicated. This may be accomplished by addition of fly ash,

lime, Portland cement, other pozzolanic material or a combination thereof. Due to its ready availability and consistency of composition, Portland cement is recommended as the proposed stabilizing agent. Pilot tests were conducted with the sludge using varying quantities of cement as the admix. The results of these tests are included in Appendix III.

The consistency of the modified sludge will limit the removal method to mechanical means. These will be augmented with hand tools as necessary for residue removal, etc.

IV. Proposed Remedial Action Plan

The presence of copper in the outflow from Tank #3 in levels exceeding the STLC has been demonstrated. Further sampling and analysis of the sludge for purposes of contaminant identification or extent is unwarranted. Sampling will be conducted on the stabilized material as required to provide predisposal characterization data to the selected Class I disposal facility.

A. Remediation Plan

SCC proposes to comply with the requirements of the Consent Agreement, Section 3.1.15 pertaining to materials contained in Pond #3 by performing the following series of tasks:

1. Materials contained in Tank #3 will be dewatered through the addition of Portland cement. Tests performed on the material indicate that the admix will be up to 10% by weight. Effective mixing and a longer set-up time will probably result in considerably less cement being used in the field stabilization process.
2. All materials contained in Tank #3 will be removed.
3. These materials will be manifested and properly transported by a licensed waste hauler to a Class I disposal facility.
4. Tank #3 will be rinsed with water until all visible indications of contamination have been eliminated. The rinse water will be discharged to SCC's approved waste water treatment system.
5. SCC will notify DHS within 15 days of project completion that all proposed work has been completed according to Section 3.1.15 (c) of the Consent Agreement.

B. Health and Safety

The following health and safety precautions will be observed during the working phase of this project:

1. SCC personnel not directly involved in the remediation project will be restricted from the immediate work area.
2. All SCC, contractor, transportation, or supervisory personnel will be provided with appropriate personal protective equipment. This will consist of Tyvek (or equivalent) coveralls, boots, gloves, goggles, and respiratory protection for inorganic gases and particulate contaminants.

A preconstruction health and safety tailgate meeting will be conducted and documented prior to commencement of work.

C. Sampling

Random samples of the materials in Tank #3 will be taken during removal and analyzed for metals and pH. Paint filter tests will also be conducted to monitor the physical state of the materials. All test results will be retained for documentation purposes only. Copies of the analytical results will be provided to DHS as they are available.

D. Supervision of Work

All work encompassing the stabilization of the sludge in Tank #3, materials removal, and health and safety requirements will be supervised by authorized representatives of Targhee, Inc. the designated project supervisor. (See Section 4.1 of the Consent Agreement)

E. Documentation

SCC will provide the following documentation to DHS:

1. Plot plan of the facility indicating the location of Tank #3.
2. Manifest records of materials transported from Tank #3 to the Class I disposal facility.
3. Documentation of tailgate health and safety advisory meeting.
4. Analytical results of samples taken from stabilized sludges during their removal.

5. Certification that all materials contained in Tank #3 have been removed in accordance with Section 3.1.15 (c) (4) of the Consent Agreement.

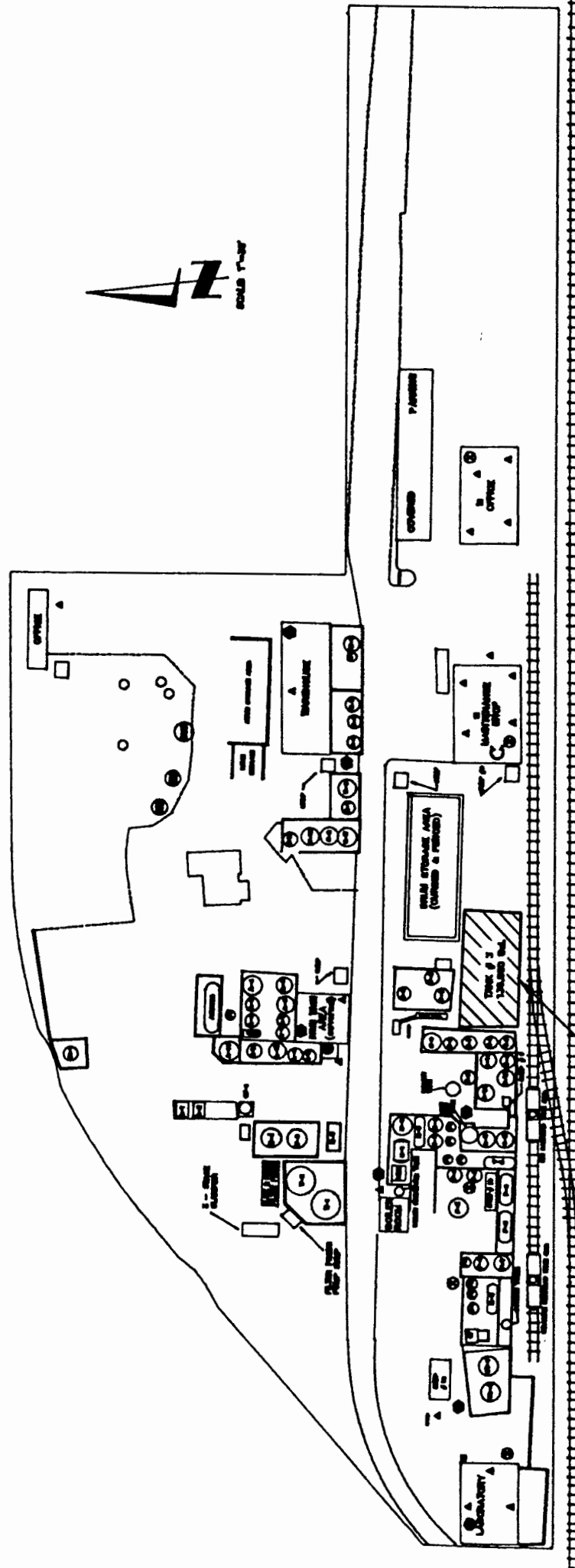
V. Schedule

Following DHS review, comment, and approval of this work plan as stipulated in Section 3.1.15 (d) of the Consent Agreement, SCC proposes the following schedule:

- A. DHS approval received.
- B. Within 45 days following Action A. the following will be completed:
 1. Chemical elimination of free liquids in Tank #3 through the addition of Portland cement.
 2. Removal of all materials in Tank #3.
 3. Transport of removed materials to a Class I disposal facility.
 4. Rinse of Tank #3 per Section IV.3.
- C. Within 60 days following Action A., DHS will be notified of project completion (this is the 15 day notice required by the Consent Agreement).
- D. Within 75 days following Action A., all documentation (excepting analytical results) as described in Section E. will be submitted.
- E. Analytical results will be submitted to DHS as available.

Appendices

- I. Plot plan of SCC facility indicating location of Tank #3.
- II. June 25, 1986 DHS sampling inspection analytical results.
- III. Laboratory report - paint filter test and treatability studies on materials in Tank #3.



SITE PLAN
SOUTHERN CALIFORNIA CHEMICAL Co.
1955
1000 S. GATEWAY
CITY OF LOS ANGELES, CALIFORNIA

Tank #3

Appendix II.

June 25, 1986 DHS Sampling Results - Tank #3

Samples from Tank #3 effluent are:

1. SCC07
2. SCC08

Attachment 3

Hazardous Materials Unit
Southern California Laboratory Section

To : Barren Peeler JUL 21 1986 SCL No. : 3996 T. 1

Sampling No : SCC01 To SCC12 California Department of Health Services Date of Report: 7/23/86

Sample Location: Southern California Chemical Co
8851 Dice Road, Santa Fe Spring 90670

Analytical Procedures Used: PH by PH-meter. Metal concentrations were
measured by flame AA on PE 3030.

Analysis Results:

	SCL#	Collector's sample #	PH At 50% Dilution	Cd	Cr	Cu	Ni	Pb	Zn
mixed	3996	SCC01	5.7	12 μg	400 μg	1900 μg	120 μg	6000 μg	6100 μg
mixed	3997	SCC02	5.9	7.7 "	300 "	1600 "	91 "	8000 "	4200 "
mixed	3998	SCC03	6.3	32 "	1400 "	6300 "	470 "	37000 "	26000 "
tank car	3999	SCC04	4.2	< 5 "	240 "	1500 "	440 "	200 "	420 "
dam pit	4000	SCC05	4.4	5.0 "	360 "	8500 "	1100 "	120 "	800 "
#4 pond	4001	SCC06	6.4	38 "	3300 "	9100 "	730 "	38000 "	25000 "
#3 ditch	4002	SCC07	7.2 (with no dilution)	< 0.1 μg	18 μg	65 μg	23 μg	< 0.5 μg	0.5 μg
#3 ditch	4003	SCC08	—	—	—	—	—	—	—
back pk lot	4004	SCC09	2.8	< 5 μg	760 μg	14000 μg	1200 μg	340 μg	660 μg
"	4005	SCC10	7.0	9.0 "	3400 "	6600 "	290 "	750 "	950 "
"	4006	SCC11	7.4	< 5 "	380 "	16000 "	13 "	11 "	53 "
"	4007	SCC12	7.5	< 5 "	3800 "	1400 "	40 "	160 "	270 "

Analysts' Signatures:

J. M. T. Zurek

7/23/86
Date

Date

Supervising Chemist's Signature:

F. J. Spammann

PAINT FILTER LIQUIDS
TEST FOR TANK NO. 3

by

S. F. Shvartsman

September 5, 1987

Distribution: J. J. Bernosky, Jr.
M. Giorgetta
G. Otterbach
R. E. Torrance

Southern California Chemical
Santa Fe Springs, California

Introduction

Paint Filter Liquids Test Method 9095 was used to determine the presence of free liquids in a representative sample of waste sludge from Tank No. 3 at SCC, SFS. (Refer to handwritten memo from Greg Otterbach - copy attached.) The method was used to determine compliance with 40 CFR 264.314 and 265.314.

Materials and Apparatus

1. Sludge from Tank No. 3:

pH	8.9
Cu	1.88%
Fe	1.35%
Cr	0.14%
Zn	0.13%
Ni	0.017%
Pb	1.00%
2. Cement
3. Conical paint filter - mesh number 60
4. Glass funnel
5. Ring stand and ring
6. Graduated cylinder

Procedure

1. The apparatus was assembled as shown in Figure 1.
2. 100 g of sample were placed into the paint filter. The glass funnel was used to provide support for the paint filter.
3. The sample was allowed to drain for 5 minutes into the graduated cylinder.
4. A portion of the sample collected in the graduated cylinder was recorded.

Test

To absorb and stabilize free liquids, the sample of sludge from Tank No. 3 was mixed with cement in different proportions (see Table I and Graph I).

Conclusion

To stabilize free liquids in the sludge from Tank No. 3, 10% of cement can be used as an absorbent solid. It must be noted that the tank was not completely empty of standing water at the time this test was done.

Since this sample for testing was taken, all standing liquid has been removed and the material has dried further. At the time of loading, the material will be tested again and probably require less cement addition. All material will be tested prior to shipment to Casmalia or any other authorized Class I landfill.


Sonya F. Shvartsman

SFS:lat
Attachments

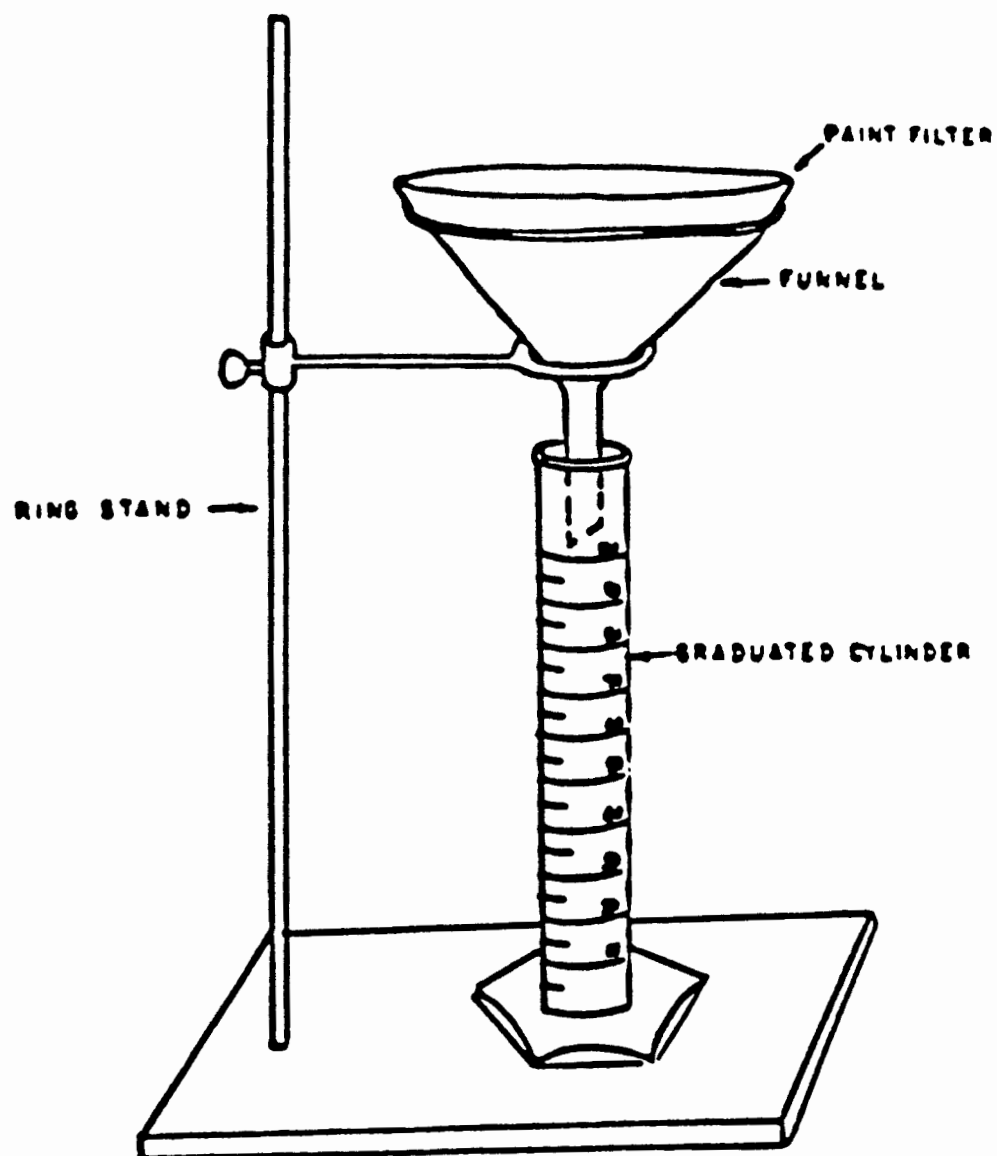
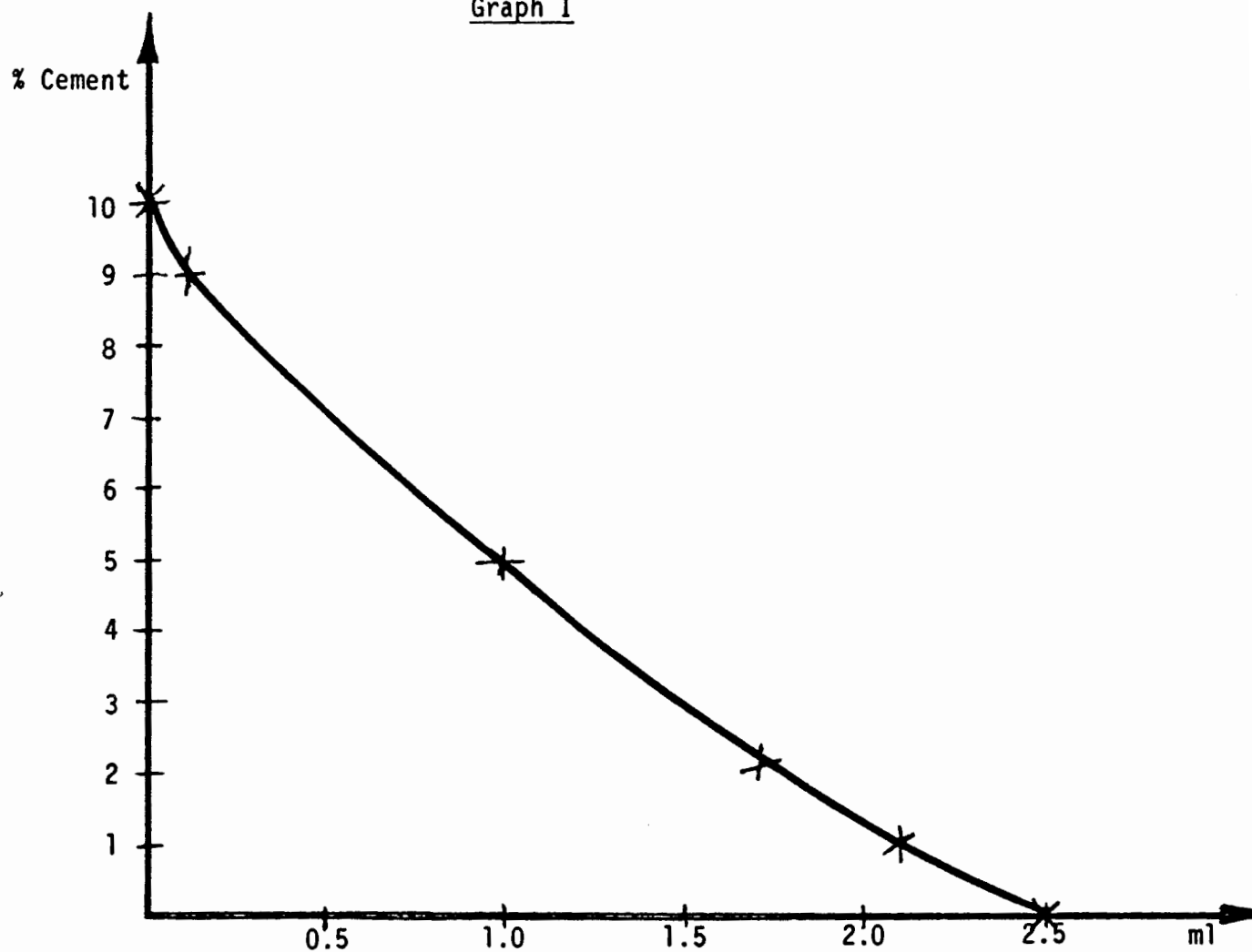
Figure I

Table I

<u>% Sample</u>	<u>% Cement</u>	<u>Free Liquids in 5 Minutes, ml</u>
100	0	2.5
99	1	2.1
98	2	1.7
95	5	1.0
91	9	0.1
90	10	0.0

Graph I

HAZARDOUS WASTE TRAINING

SOUTHERN CALIFORNIA CHEMICAL COMPANY, INC.

SANTA FE SPRINGS, CALIFORNIA

The following is a list of Southern California Chemical Company employees who in any way assume hazardous waste management responsibilities as a part of their regular assignment.

The list is arranged alphabetically by departments within the company. Included is the employee's name, usual department assignment, subject and date of training received.

Provided as an attachment is a summary of topics of employee training and dates arranged in chronological order.

Summary of Employee Training

The following are dates and subjects of formal inservice training provided to Southern California Chemical Company employees:

<u>Date</u>	<u>Subject</u>
1/11/85	Hazardous Waste Training
3/11/85	Compliance Training Seminar OSHA "Right to Know" & RCRA (Attended by Tere King only)
5/21/8	Hydrogen Peroxide
2/19/86	Chlorine, Sodium Hydroxide
5/6/86	Hazard Communication Program
6/19/86	Caustic Soda (Sodium Hydroxide)
* 8/8/86	Fire Safety
4/24/87	Hazardous Waste Manifests
6/1/87	RCRA Training, Hazardous Waste and the Law
6/19-20/87	Hazardous Material/Waste Driver
* 7/29/87	Eye Safety

*Training was provided in both English and Spanish.

EXECUTIVE/MANAGEMENT PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
BARTLEY, THOMAS	HYDROGEN PEROXIDE	May 21 85
CHRISTIAN, JANICE	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	FIRE SAFETY	Aug 8 86
	HYDROFLUORIC ACID	Mar 7 86
	HYDROGEN PEROXIDE	May 21 85
GIORGETTA, MILTON	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HYDROGEN PEROXIDE	May 21 85
	RCRA, HAZ. WASTE & THE LAW	Jun 1 87
KING, TERE	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS MATERIALS	Jan 11 85
	HYDROFLUORIC ACID	Mar 7 86
	OSHA COMPLIANCE & RCRA	Mar 11 85
	RCRA, HAZ. WASTE & THE LAW	Jun 1 87
OTTERBACH, GREGOR	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS MATERIALS	Jan 11 85
	HYDROGEN PEROXIDE	May 21 85
	MANIFESTS	Apr 24 87
	RCRA, HAZ. WASTE & THE LAW	Jun 1 87
SALES DEPT.:		
MC CAFFREY, WILLIAM	HAZARDOUS COMMUNICATION PROGRAM	May 6 86

LABORATORY PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
NAVARRO, JUAN	(NONE, NEW EMPLOYEE)	
SHVARTSMAN, SONYA	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	EYE SAFETY	Jul 29 87
	HYDROFLUORIC ACID	Mar 7 86
	RCRA, HAZ. WASTE & THE LAW	Jun 1 87
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	FIRE SAFETY	Aug 8 86
TRAN, NGOC	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
	HYDROFLUORIC ACID	Mar 7 86

OFFICE/CLERICAL PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
ABBOTT, JUDI	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
ALATRISTE, CATHY	(NONE, NEW EMPLOYEE)	
BRANNAN, ROSEMARY	CHLORINE & SODIUM HYDROXIDE FIRE SAFETY	Feb 19 86 Aug 8 86
CAMPOS, GLORIA	(NONE, NEW EMPLOYEE)	
CARLSON, PAULA	CAUSTIC SODA (SODIUM HYDROXIDE) CHLORINE & SODIUM HYDROXIDE HYDROGEN PEROXIDE	Jun 19 86 Feb 19 86 May 21 85
DU BOIS, GLORIA	(NONE, NEW EMPLOYEE)	
HUEBNER, CAROL	CHLORINE & SODIUM HYDROXIDE FIRE SAFETY HAZARDOUS COMMUNICATION PROGRAM HYDROGEN PEROXIDE	Feb 19 86 Aug 8 86 May 6 86 May 21 85
ROSELI, MELISSA	CAUSTIC SODA (SODIUM HYDROXIDE) CHLORINE & SODIUM HYDROXIDE HYDROGEN PEROXIDE	Jun 19 86 Feb 19 86 May 21 85
SPERLING, LOUISE (TUVESON)	CAUSTIC SODA (SODIUM HYDROXIDE) CHLORINE & SODIUM HYDROXIDE	Jun 19 86 Feb 19 86

MAINTENANCE PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
ARAGON, MITCHELL	EYE SAFETY	Jul 29 87
CERVANTES, JOSE	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
	HYDROGEN PEROXIDE	May 21 85
HUNT, WAYNE	(NONE, NEW EMPLOYEE)	
SEYMOUR, TIMOTHY	EYE SAFETY	Jul 29 87
SEYMOUR, WILLIAM	EYE SAFETY	Jul 29 87
WOODSON, JAMES	(NONE, NEW EMPLOYEE)	

PRODUCTION PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
CARRANZA, HORACIO	EYE SAFETY FIRE SAFETY	Jul 29 87 Aug 8 86
CONTRERAS, JOSE	EYE SAFETY	Jul 29 87
GARCIA, MARCOS	EYE SAFETY HAZARDOUS COMMUNICATION PROGRAM	Jul 29 87 May 6 86
GUZMAN, AURELIO	CAUSTIC SODA (SODIUM HYDROXIDE) EYE SAFETY HYDROGEN PEROXIDE	Jun 19 86 Jul 29 87 May 21 85
GUZMAN, FELIPE	CAUSTIC SODA (SODIUM HYDROXIDE) FIRE SAFETY	Jun 19 86 Aug 8 86
GUZMAN, HECTOR	CHLORINE & SODIUM HYDROXIDE EYE SAFETY FIRE SAFETY HAZARDOUS COMMUNICATION PROGRAM	Feb 19 86 Jul 29 87 Aug 8 86 May 6 86
HEREDIA, FRANCISCO	CAUSTIC SODA (SODIUM HYDROXIDE) CHLORINE & SODIUM HYDROXIDE FIRE SAFETY HAZARDOUS COMMUNICATION PROGRAM	Jun 19 86 Feb 19 86 Aug 8 86 May 6 86
LOPEZ, AGAPITO	CHLORINE & SODIUM HYDROXIDE EYE SAFETY	Feb 19 86 Jul 29 87
MIER, BENJAMIN	(NONE, NEW EMPLOYEE)	
MORONES, APOLONIO	EYE SAFETY FIRE SAFETY HAZARDOUS COMMUNICATION PROGRAM	Jul 29 87 Aug 8 86 May 6 86

PRODUCTION PERSONNEL, CONT.

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
OROS, CARMELO	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
ROSALES, JOSE	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
ROSALES, MATEO	EYE SAFETY	Jul 29 87
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
SALAS, ISMAEL	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	EYE SAFETY	Jul 29 87
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
VAZQUEZ, JUAN	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	EYE SAFETY	Jul 29 87
	FIRE SAFETY	Aug 8 86
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86

TRANSPORTATION PERSONNEL:

<u>EMPLOYEE NAME</u>	<u>SUBJECT</u>	<u>DATE</u>
BENITEZ, JOSE	(NONE, NEW EMPLOYEE)	
GARCIA, LEONARD	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	CHLORINE & SODIUM HYDROXIDE	Feb 19 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
	HYDROGEN PEROXIDE	May 21 85
	MANIFESTS	Apr 24 87
GUARDADO, JORGE	(NONE, NEW EMPLOYEE)	
LOPEZ, HECTOR	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS MATERIALS	Jan 11 85
	HYDROGEN PEROXIDE	May 21 85
MORONES, FRANCISCO	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	MANIFESTS	Apr 24 87
RODRIGUEZ, JOSE	FIRE SAFETY	Aug 8 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS COMMUNICATION PROGRAM	May 6 86
	HAZARDOUS MATERIALS	Jan 11 85
	MANIFESTS	Apr 24 87
TOPETE, SALVADOR	CAUSTIC SODA (SODIUM HYDROXIDE)	Jun 19 86
	FIRE SAFETY	Aug 8 86
	HAZ. MATERIAL/WASTE DRIVER	Jun 19 87
	HAZARDOUS MATERIALS	Jan 11 85
	MANIFESTS	Apr 24 87

KEITH WALSH AND ASSOCIATES

1671 MELROSE DRIVE
CORONA, CALIFORNIA 91720
(714) 371-1180

HAZARDOUS MATERIALS TRAINING

DATE: 1/11/85

PARTICIPANTS

1/12/85

PLEASE PRINT		PLEASE PRINT	
NAME	EMPLOYEE #	NAME	EMPLOYEE #
1. Hector D. Lopez		21. José Luis Rodriguez	
2. SALVADOR TOPETE		22. ED GUERRERO	
3. JAMES H FERGUSON		23. SALVADOR TOPETE	
4. José Luis Rodriguez		24. JAMES H FERGUSON.	
5. ED GUERRERO		25. TERE King	
6. Greg GREGOR OTTERBACH		26. Héctor D. López	
7. TERE KING		27. GREGOR OTTERBACH	
8.		28.	
9.		29.	
10. Shipping Papers.		30.	
11. Audrey Adkins		31.	
12.		32.	
13.		33.	
14.		34.	
15.		35.	
16.		36.	
17.		37.	
18.		38.	
19.		39.	
20.		40.	

Employees' Acknowledgment of Receipt of
Material Safety Data Sheet (MSDS)

In accordance with "Employee-Right-to-Know" laws, I acknowledge that I have received a copy of a Material Safety Data Sheet for Hydrogen Peroxide and that this material was reviewed during the Safety Meeting of May 21, 1985.

<u>Name</u>	<u>Signature</u>
1. <u>Adkins, Audrey L.</u>	<u>Audrey L. Adkins</u>
2. <u>Alonzo, Andra E.</u>	<u>Andra E. Alonzo</u>
3. <u>Bartley, Thomas R.</u>	<u>T. Bartley</u>
4. <u>Carlson, Paula</u>	<u>Paula Carlson</u>
5. <u>Cervantes, Jose</u>	<u>J. Cervantes</u>
6. <u>Christian, Janice</u>	<u>Janice Christian</u>
7. <u>Espinoza, Jesus</u>	<u>J. Espinoza</u>
8. <u>Esquer, Ernest</u>	<u>Ernest Esquer</u>
9. <u>Ferguson, James</u>	<u>J. Ferguson</u>
10. <u>Galicia, Juan L.</u>	<u>Juan L. Galicia</u>
11. <u>Garcia, Leonard</u>	<u>Leonard Garcia</u>
12. <u>Garcia, Marcos R.</u>	<u>M. Garcia</u>
13. <u>Giorgetta, Milt</u>	<u>Milt Giorgetta</u>
14. <u>Gonzales, Richard E.</u>	<u>Richard Gonzales</u>
15. <u>Guzman, Aurelio</u>	<u>Aurelio Guzman</u>
16. <u>Guzman, Felipe</u>	
17. <u>Guzman, Pedro</u>	
18. <u>Huebner, Carol M.</u>	<u>Carol M. Huebner</u>
19. <u>King, Tere</u>	
20. <u>Krupp, Gene P.</u>	<u>Gene P. Krupp</u>
21. <u>Lopez, Agapito</u>	
22. <u>Lopez, Hector D.</u>	<u>Hector Lopez</u>
23. <u>Minger, Arlene</u>	<u>Arlene Minger</u>
24. <u>Morones, Apolonio</u>	<u>Apolonio Morones</u>
25. <u>Negrete, Guadalupe</u>	
26. <u>Oroz, Carmelo B.</u>	
27. <u>Otterbach, Gerd G.</u>	<u>G. Otterbach</u>
28. <u>Reagan, Charles R.</u>	<u>Charles R. Reagan</u>
29. <u>Rodriguez, Jose Luis</u>	
30. <u>Rodriguez, Ramon</u>	
31. <u>Rosales, Jose</u>	
32. <u>Roseli, Melissa</u>	<u>Melissa Roseli</u>

Employees' Acknowledgment of Receipt of
Material Safety Data Sheet (MSDS)

In accordance with "Employee-Right-to-Know" laws, I acknowledge that I have received a copy of a Material Safety Data Sheet for Chlorine and Sodium Hydroxide (Caustic) and that this material was reviewed during the Safety Meeting of February 19, 1986.

<u>Name</u>	<u>Signature</u>
1. <u>PAULA CARLSON</u>	
2. <u>Melissa Rossi</u>	
3. <u>Carl Huber</u>	
4. <u>Mike Ford</u>	
5. <u>HECTOR URIBE</u>	
6. <u>Jose Gervantes</u>	
7. <u>Hector M. Gutman</u>	
8. <u>ISMAEL SALAS</u>	
9. <u>Francisco Hernandez</u>	
10. <u>Jose Morales</u>	
11. <u>Camelo Oros</u>	
12. <u>John Sanchez</u>	
13. <u>Agapito A. Lopez</u>	
14. <u>Alene Mingo</u>	
15. <u>Singha Shastri</u>	
16. <u>TRAN, NGOC</u>	
17. <u>Germany Brannen</u>	
18. <u>Amadio J. Alonzo</u>	
19. <u>Milt Sivigetta</u>	
20. <u>Janice Christian</u>	
21. <u>Paul Dui</u>	
22. <u>Louise Sperling</u>	

approx. 30 mins. review of handouts

Employees' Acknowledgment of Receipt of
Material Safety Data Sheet (MSDS)

In accordance with "Employee-Right-to-Know" laws, I acknowledge that I
have received a copy of a Material Safety Data Sheet for hydrofluoric acid
and that this material was reviewed during the

Safety Meeting of 3/7/86.

Name

Signature

1. SONYA SHVARTSMAN
2. NGOC TRAN
3. Jamie Christian
4. Tere King
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____
26. _____
27. _____
28. _____
29. _____
30. _____
31. _____
32. _____

Sonya Shvartsman
Jamie Christian
TERE KING

1 copy
MSDS
First
Aid
Treatment
for
HF Burns
3 Recommended
Medical
Treatment
(HF)
4 copy
DOT
Emergency
Response
guidebook

Pl. #
JC



(714) 521-7960

TRAINING RECORD

PLANT *SANTAL FE SPRINGS*

Subject/Session: HAZ. Com. Program

Date of Training: 5-6-86

Instructor(s) Name(s) & Title(s)

1. Paul Phillips - Safety Mgr (CP)
2. Greg Ottenbach - Plant Mgr
- 3.

Training Materials Used

1. } AS LISTED IN HAZARD
2. } COMMUNICATION PROGRAM
3. } APPENDICES D & E

[illegible]

Employees' Acknowledgment of Receipt of
Material Safety Data Sheet (MSDS)

In accordance with "Employee-Right-to-Know" laws, I acknowledge that I have received a copy of a Material Safety Data Sheet for Caustic Soda (Sodium Hydroxide) and that this material was reviewed during the Safety Meeting of June 19, 1986.

Name - PLEASE PRINT

Signature

1. MILTON GIORGETTA	Milt Giorgetta
2. PAULA CARLSON	Paula Carlson
3. Frances Wallace	Frances Wallace
4. Lupo Bujio	Lupo Bujio
5. Juan Andres Vazquez G.	Juan Andres Vazquez G.
6. FRANCISCO HEREDIA	Francisco Heredia
7. JOE MONARREZ	Joe Monarrez
8. ROSE	Rosales
9. Exline Arzuman A.	
10. Samuel Salas	
11. Hector Lopez	Hector Lopez
12. LEONARD GARCIA	Leonard Garcia
13. Melissa Rosoli	Melissa Rosoli
14. John G. SANCHEZ	John G. Sanchez
15. Salvador Lopez SALVADOR LOPEZ	Salvador Lopez
16. Michael L. Ford	Michael L. Ford
17. GUILLIO BUZMAN	Guillermo Buzman
18. Carmelo OROS	Carmelo Oros
19. ANDRAE E. FLONZO	Andrae E. Flonzo
20. TRAN, NGOC	Tran
21. Souya Shwartsman	Souya Shwartsman
22. LOUISE T. SPERLING	Louise T. Sperling
23. TERE KING	Tere King
24.	
25.	
26.	
27.	
28.	
29.	
30.	
31.	
32.	

MSDS's
given to Greg
Millies Gene,
Jan, Carol
who were
present at
meeting
H

Please sign next to your typed name to acknowledge that you participated in the fire safety film and practice fire on Friday, August 8, 1986.

Adkins, Audrey L.
Alonzo, Andra E.
Bartley, Thomas R.
Brannon, Rosemary C.
Carlson, Paula
Carranza, Horacio S.
Cervantes, Jose
Christian, Janice
Ferguson, James
Ford, Michael L.
Garcia, Leonard
Garcia, Marcos R.
Giorgetta, Milton J.
Guzman, Aurelio
Guzman, Felipe
Guzman, Hector M.
Heredia, Francisco
Huebner, Carol M.
King, Tere
Krupp, Gene P.
Lopez, Agapito Ramirez
Lopez, Hector D.
out sick Minger, Arlene
Monarrez, Joe
Morones, Apolonio
Negrete, Guadalupe B.
Oros, Carmelo B.
Otterbach, Gregor
Rodriguez, Jose Luis
Rosales, Jose
Roseli, Melissa
Salas, Ismael
Sanchez, John G.
Seymour, William
Shvartsman, Sonya
Sperling, Louise T.
Topete, Salvadore
Tran, Ngoc Thi
Vazquez, Juan Andres
Wallace, Frances

Rosemary C. Brannon

Horacio Carranza S.

Jose Cervantes

Janice Christian

James Ferguson

Sepe Arzuman H.

Hector M. Guzman

Francisco Heredia

Carol M. Huebner

Tere King

Joe Monarrez

Apolonio Morones

Carmelo Oros

Gregor Otterbach

Jose Luis Rodriguez

Jose Rosales

John G. Sanchez

Sonya Shvartsman

Salvador Topete

Juan Andres Vazquez

4/24/87

Training done by
J. Gibb

Handed Out 1/1/86

Driver review of manifest completion,
safety rules, answered questions, advised
~~not to pick up~~ if manifest not properly completed or
signed. Reviewed 2/15/85

Francisco Gomez 4/24/87

Martin Rodriguez 4/24/87

Salvador Lopez 4/24/87

John Doe 4-24-87

John Doe 4-24-87

MEMORANDUM

June 1, 1987

TO: Training File
FROM: Tere King
SUBJECT: RCRA Training

cc: Personnel files of
Greg Otterbach
Milt Giorgetta
Gene Krupp
Sonya Shvartsman
Tere King

This memo is for training documentation purposes only.

On Friday, May 15, 1987, the above-named individuals received nine to nine and one-half hours of "classroom" regulatory training by their attendance at the Parker, Milliken, Clark, O'Hara & Samuelian* seminar on "Hazardous Waste Management and the Law."

Each attendee received a copy of the attached binder, which details the subjects covered.

TK:ls
Attachment: Binder - file copy only

*Parker, Milliken, Clark, O'Hara & Samuelian
Attorneys at Law
333 South Hope Street, 27th Floor
Los Angeles, California 90071-1488

213/683-6500

KEITH WALSH AND ASSOCIATES, INC.

1671 MELROSE DRIVE
CORONA, CALIFORNIA 91720
(714) 371-1180

SOUTHERN CALIFORNIA CHEMICAL CO., INC.
COMPANY

HAZARDOUS MATERIAL/WASTE DRIVER TRAINING
TYPE OF TRAINING

DATE: JUNE 19-20, 1987

PARTICIPANTS

PLEASE PRINT		PLEASE PRINT	
NAME	EMPLOYEE #	NAME	EMPLOYEE #
1. Francisco Morales		21. Francisco Morales	
2. Hector Lopez		22. Hector Lopez	
3. Salvador Topete		23. SALVADOR TOPETE	
4. Jim Ferguson		24. JIM FERGUSON	
5. Leonard Garcia		25. LEONARD GARCIA	
6. Judi Hale Abbott		26. JUDI HALE ABBOTT	
7. Debbie Chapman		27. DEBBIE CHAPMAN	
8. Tere King		28. TERE KING	
9. Greg Otterbach		29. G. OTTERBACH	
10. Mateo Rosales		30. MATEO ROSALES	
11. Milton Giorgetta		31. MILTON GIORGETTA	
12. Jose L. Rodriguez		32. Jose L. Rodriguez	
13.		33.	
14.		34.	
15.		35.	
16.		36.	
17.		37.	
18.		38.	
19.		39.	
20.		40.	

CC: Training file
Personnel files
Paul Phillips

July 29, 1987

HANDOUTS:
VCR TAPE &
EYE SAFETY PAMPHLET

Time: 1 hr. 15 min.
J. King

ATTENDANCE RECORD FOR EYE SAFETY MEETING

PRINT YOUR NAME HERE

WRITE YOUR NAME HERE

8:30 A- 9:45	1. Carmelo Oros	Carmelo Oros
Francisco Heredia absent due to being sworn in as citizen.	2. Agapito R Lopez	Agapito R. Lopez
	3. JOSE CONTRERAS	Jose Cervantes
	4. Apolonio Morones	Apolonio Morones
	5. Marcos Garcia	Marcos Garcia
Andy Alonzo in jail	6. Sonya Shvartsman	Sonya Shvartsman
	7. Milt Giorgetta	Milt Giorgetta
	8. Jose Cervantes	Jose Cervantes
	9. Guadalupe Buco Negrete	Lupe Negrete
	10. GREGOR OTTERBACH	Gregor Otterbach
	11. Tere King	Tere King
2:00- 3:45	12. Horacio Carranza	Horacio Carranza
	13. Juan Andres Va'quez	Juan Va'quez
	14. Jose Rosales	Jose Rosales
Felipe Guzman couldn't come in early	15. Mateo Rosales	Mateo Rosales
	16. Hector M. Guzman	Hector M. Guzman
	17. Ismael Salas	Ismael Salas
Drivers	18. Aurelio Guzman	Aurelio Guzman
	19. Tim Seymour	Tim Seymour
	20. Mitch Aragon	Mitch Aragon
	21. Willie Seymour	Willie Seymour
	22. Ngoc Tran	Ngoc Tran
	23. Gene Krupp	Gene Krupp
	24. Tere King	Tere King